



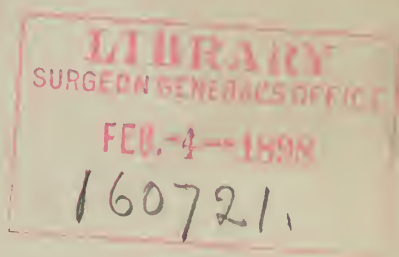
Dr. J. J. Galloway

TEXT BOOK
OF
HOMŒOPATHY

BY
DR. v. GRAUVOGL,
OF NUREMBURG.

TRANSLATED BY GEO. E. SHIPMAN, M.D.,
AT THE REQUEST OF THE AUTHOR.

PART I.



CHICAGO:
C. S. HALSEY. WESTERN NEWS CO.
NEW YORK:
BOERICKE & TAFEL, No. 145 GRAND STREET.
LONDON, ENG.:
S. COMPSTON, 2 FINSBURY CIRCUS, E. C.
1870.

Entered according to Act of Congress, in the year 1870, by

GEORGE E. SHIPMAN,

In the Clerk's Office of the District Court of the United States for the North'n District of Illinois

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PREFACE.

The text book of Homœopathy is HAHNEMANN'S "ORGANON." Though this Organon, however, had appeared in many editions, some of its empiric data still lacked foundation according to natural laws. Nevertheless his doctrines afforded to every physician, who would allow himself to be governed thereby, such strikingly favorable results that, as statistics at the close of this work show beyond dispute, they always and everywhere threw physiological medicine, vulgo Allopathy, quite in the shade.

But since Homœopathy is nothing but a system of Therapeutics resting upon the foundation of all the natural sciences, Chemistry, Physics, Physiology, etc., a confirmation of the Organon and the proof of its conformity with natural sciences may—according to the experience of theoretical and practical progress made therein—be required often and at various times. And, if the practice of life has a word to say; then it is the duty of every practical physician, which he should perform to the best of his ability, to make public the knowledge and experience which he has acquired, no matter whether, at the present moment, they shall be regarded favorably or unfavorably; for, frequently, their real value is finally settled by the future only.

A text book, however, which should give nothing but theoretical indications, would come short of its aim; it must present examples; its principles must be demonstrated and set forth by cases and comparisons taken from life. Then every one can accurately apply what he has learned, to his patient, and, at the same time, confirm it by the test of success.

Furthermore, a text book, where it has matters to treat of concerning which opinions are as yet divided, not only should give the convictions of its author, or any other authority, but

it should set these matters forth in a true light by means of a critique in conformity with natural laws, so that one's conclusion should not be confined to the result alone.

Every criticism which my writings have experienced at home and abroad, has been conscientiously considered; unscientific expositions, however, preclude any farther discussion.

When I committed to the press, seven years ago, the "Principles of Physiology, Pathology and Therapeutics of Homœopathy," I did not wish to undertake to elaborate a text book of the comprehensive art and science of Homœopathy; for such an undertaking many dark places were first to be lighted up. Thus that work of mine, remodeled and thoroughly completed, only now appears under the title of a text book.

I resign all pretence to any party stand-point, since there should be no party in science, consequently none in Therapeutics; I desire, on the contrary, that every reproach and every attempt at contradiction should be sustained not only subjectively, but, as becomes every science, at least predominantly objectively.

Aside from its contents, as indicated by the title, this work has also the intention to respond to the necessary though not easy demands of a medical logic elucidated by practical examples; for "opinions" — and those, unfortunately, mean nothing but "faith in authorities" — separate physicians still more into hostile camps and paralyze medical activity which, were it united, would always be attended by the happiest results; these, however, are not attainable under such lamentable circumstances.

The cause of this state of things clearly cannot lie in the subjects themselves about which medical factions contend, since these subjects stand to each other in the natural relation of cause and effect, but is brought about by arbitrary "conceptions" thereof.

Hence the necessity is abundantly apparent of intertwining the instruments of logic with the contents of a therapeutic text book.

THE AUTHOR.

NUREMBERG, December, 1865.

TRANSLATOR'S PREFACE.

SOME competent authority — his name escapes me — says that if one volunteers to sing before a company, his singing is open to criticism; but not if he sings by request. I may justly hope, therefore, for some indulgence, when I state that the labor and responsibility of translating this great work of VON GRAUVOGL was not sought by me. The work was sent me by the author, with a request to translate it. While I will own that many were much more capable to do the author justice than myself, I did not hear of any who were willing to undertake the labor, especially when no publisher could be found who would assume the risk of publishing the work. I did not feel at liberty to shrink from the task set before me, neither from a sense of my own unfitness, the difficulty of the translation, the mechanical labor incident to such a work, nor the responsibility of procuring the means for printing the translation when done. The work has not been performed in hours of literary leisure, but in hours which should have been given to rest or recreation, since the cares of a city practice and the management of a medical quarterly left no other time for its performance. If any one thinks that he could have made a better translation, I can only regret that his ability was not accompanied with a readiness to exercise it. I am gratified with the reflection that I have done the very best I was capable of doing under the circumstances, and I now commit the work to the public with the hope that its imperfections may not be found such as will materially hinder its usefulness, and that it may shed some ray of light upon the path of the physician, often obscure, and some new ray of hope and comfort in the bed-chamber of the sick.

I should be more than unjust if I failed in this connection to give due credit to those who have assisted me in this arduous undertaking. Especial acknowledgment is due to my highly esteemed friend, E. TIETZE, M.D., of Philadelphia, for the care with

which he has revised the whole work ; to his kind assistance I am more indebted than words can express—truth requires me to say that if the translation has any merits, it is due rather to his learning than mine. I am also indebted to DR. C. HERING, for the revision of the proving of Benzoic acid and for many useful hints, as well as to Dr. CARROLL DUNHAM, of New York, for many timely suggestions regarding difficult passages.

Nor should I fail to acknowledge my indebtedness to Mr. O. S. WESTCOTT, of this city, for his revision of the mathematical portions of the work, and for many valuable criticisms.

Some acknowledgments are also due to the friends who have aided me in this enterprise by their subscriptions. Without their aid this work would not have seen the day, and the names are given in this edition that the friends of Homœopathy may know to whom they are indebted for the appearance of this translation.

GEO. E. SHIPMAN.

CHICAGO, *June* 1, 1870.

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PART II.

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INTRODUCTION.

§. I.

THE aim of all *science* must be directed to this: in the place of the *contingent* to set up that which law makes *necessary*, and every particular to refer to its universal: for these two predicates connect science with things.

That this postulate is not yet put at the head of every branch of medical science and art, is one of the greatest riddles of this enlightened age, as we are wont, euphemistically, to style it. In truth, the nature and character of the structure of non-Homœopathic therapeutical theories, is in the most direct opposition to this postulate, as will be more readily seen anon. Even in the sciences elementary to Therapeutics, in Chemistry, Physiology, and Pathology, we find a great number of accidental observations; these are partly collected and proved to be correct by that art of experiment which is now-a-days exclusively practiced, partly rejected, or, we find those already thrown away, are brought into use again, and this uncertainty is the characteristic of contingent, empirical knowledge.

The subsequent pages will show, that the purely empirico-experimental acquisitions of the dominant physiological school in therapeutics are nothing but accidental, acquired without any principle, hence doubtful in particulars and, as to generals, without any value. Only the art of observation, *i. e.*, the mental capacity of connecting our perceptions, which, in the Homœopathic school is cultivated simultaneously with the art of experiment, has been able to find ways and means, by which the contingent, which is nothing but the result of casualties, thus far unknown, is eliminated from medical practice.

New experiments are, indeed, made every day, and in every direction, by the adherents of physiological medicine, but without any connexion; and the demand of modern times for isolated experiments, is set up as an excuse.

But this accidental demand of the times, what has it not to excuse? This symbol of instability should rather admonish us incessantly, that

the present hour, must throw the past into utter oblivion, unless we hold fast, intellectually, to the useful things which the past has produced. We must gain *space* in *time*, but living space. Not by the empiric accumulation of facts *perceived* (facts of *perception*), but by their *well-weighed* appreciation, according to the eternal laws of nature, is their existence secured for all time. Facts, which this criterion rejects, are scientifically worthless.

Hence in Homœopathy, we strive, not only to separate the contingency from the *event*, *i. e.*, to determine the causal succession from what has taken place, but we also strive to become master of that contingency which makes our *judgment* uncertain. Although we seek to prevent, but often in vain, the contingencies of the event, according to the rules of experiment, *analytically*, yet, on the other hand, we remove the contingency from the judgment, synthetically only, by the connection of the laws of nature with these events, hence in this way, it is, that we understand how to explain the dependence of the latter upon the former, and shape our judgment and actions accordingly. *In this synthesis, consists the art of observation.*

But one of the greatest hindrances to the formation of correct judgment, is the subjective opinion, which, in physiological medicine, meets us at every step, so persistently, and which rests upon the accidental degree of individual knowledge. Hence, to-day, the weight of the current opinion in the old school, or the so-called physiological medicine, inclines considerably to the side of subjectivity, consequently, in therapeutics, we must divest ourselves of all subjective opinions and be studious to turn ourselves to the objectivity of facts, as well as to that of the laws of nature, which govern these facts; for, the connecting of facts with a conclusion drawn therefrom, does not lie in the arbitrary will of the subject forming it, but in the laws, in accordance with which these events had necessarily to occur as they did occur, and must occur, in all future time.

§. 2.

But this can never come to pass without a strife with the predominant subjective tendency of the physiological school. Void of independence, *i. e.*, ever without any tenable principle hitherto, it is irrevocably linked with the changing *authority* of its leaders.

Men thus inclined become so subjective, that, with every thing which comes in question, they first think of themselves; and its relation to their own personality, so utterly arrests their whole attention, that no time is left to them for the comprehension of any subject pre

sented. Hence, their egotism so benumbs their capacity of perception that they are just as easily offended and hurt, as flattered and won. On the other hand, their conclusions are naturally corrupt and in favor of their own side; the most evident token of intellectual incapacity, of which examples enough will follow. But, if we turn to objectivity, quite another view presents itself; for the *contingent subjective* mode of connecting the mental associations of our ideas and the *necessary objective* oneness of our perceptions are of very different nature. Thence we learn, at once, the incontestible truth of logical laws, that *every opinion* has claim to validity in so far as it is the product of the value of the object, in connection with the perceptive capacity of the one forming the opinion; that one, for instance, can only comprehend and understand another, according to the measure of the knowledge which he may have acquired, and he will never feel and realize this subordinate point so long as he does not take the trouble to increase his knowledge by that of others.

Predominant subjectivity forms, in this way, a complete armory of natural weapons against intellectual superiority, which everywhere, and at all times, has been the most hated and the most feared, because every view of another will thrust itself, in a hostile manner, into the midst of its (subjective) connections already entertained, and call it to renewed labors, which threaten to shake unpleasantly the system laboriously completed; that system of all those who, though not necessarily old in body, have prematurely grown old in mind. Thus it befel Pater Scheiner. He was rebuffed, when he told his Prior of the spots on the sun, which he had seen with his telescope, with these words: I have read Aristotle through, and find nothing of the kind, and you may therefore rest assured that what you have seen is only a deception of your senses, or of your glass, and I warn you against such a heresy.

§. 3.

But what does it mean to have a *conviction* of the truth or falsity of a thing? Nothing more than, from subjective grounds, to believe it or not believe it. Conviction is a matter of *reflection* and *feeling*; but the domain and object of *knowledge* is nature. In natural sciences, then, we never have to do with belief and conviction, but only and simply with knowledge. Every expression of subjectivity, thus every belief and conviction, in questions of natural science, is void, a mere subjective status, which has not the least scientific value, so long as the

reasons thereof are not gathered from the objective state of the object considered.

Perception and *deduction* form, it is true, the sources of our knowledge, but to find out which knowledge is the subject of perception, and which of deduction, to do this secure from error, requires manifold intellectual operations, sometimes entirely overlooked; for we may fancy that we see something, and really see it, and yet our *statement* concerning it is, in truth, nothing but *deduction*. The perception that it is day when the sun rises, and night when it sets, is a ready deduction to every rustic. But if I should say to him: "That which you see, as well as that which you deduce therefrom, is false; the sun does not rise and set, and that which seems to you to cause day and night is, that you yourself are moving around the sun," he would stare and thank Heaven that he was not so stupid as the one who would try to palm such sheer nonsense as that on him. But how would it help the matter, in such a case as this, to go with him into the laws of Astronomy? Thus, many a one may say that he is convinced that such a patient was made better or worse by such and such a treatment, because he himself had been injured or benefited by this or that treatment; but what he actually saw, as regards time, place, circumstances, art and science, in order to enable him to draw his conclusions, this is a matter very difficult or utterly impossible for him to comprehend, and just as impossible would it be to bring him to any other conviction, because such conviction must be drawn from a region as utterly unknown to him as is that of astronomy to the rustic.

§. 4.

Another chief source of sluggish habits of thought, and prejudices arising from the laws of mental association, is found in the habit of considering that which is *incomprehensible* to be utterly *impossible*. But as little as the conviction of a thing lies in the thing itself, just so little does its *incomprehensibility*; this rather lies in the contingent and insufficient perceptive faculty of him who cannot comprehend it.

Every fallacy from the source of convictions and incomprehensibilities may, for the ignorant, assume even the appearance of science, owing to the position of its originator, as long as the former is so absurd as to believe that we now know all the laws of nature, and forms his opinions accordingly, or as long as the latter are disposed to announce objects of their perceptive *faculty* to be laws of the perceived *objects*. With this fallacy, Des Cartes kindled a furious war against the theory of gravitation, on the ground that it is incomprehensible how

bodies, not in contact, can affect each other. He could only maintain this position because, of the primary forces of matter, that of attraction at a distance was unknown to him.

§. 5.

Hence, it is preconceived opinion, it is *prejudice*, which has, at all times, made the whole human race inattentive to facts which ran counter to propositions once accepted, let these facts be ever so abundant and striking. And, by reason of this ineradicable prejudice, regarding the indisputable truth of this position, once received as correct, all attempts were at once branded as useless, even were it only to make an experiment, which might have led one to the truth or falsity of those alleged facts. The opponents of Copernicus, for example, maintained that the earth stood still and could not move, because otherwise, a stone let fall from the top of a tower, could not strike at the foot of the tower, but at a little distance from it, and that, too, in a direction different from that required by the motion of the earth, as assumed by Copernicus. They cited the case, also, of a swiftly sailing ship, from the mast-head of which if a ball were dropped, it would strike, not at the foot of the mast, but nearer the stern. *But if any one had really made this experiment*, he would have observed that the ball would fall just at the foot of the mast, and that this, further, was no proof *against* the theory of Copernicus, but *for* it. The neglect of an experiment, which might settle a dispute, originates in the fact that we are often more foolish than we think we are.

§. 6.

The foregoing paragraphs present a faithful picture of the most usual and most popular fallacies which have been, and still are, used, in vain, as weapons in the strife against Homœopathy, alike by the learned and unlearned. Would that every one who undertakes to render a verdict against the Theory and Practice of Homœopathy, without previously studying the science thoroughly, and putting it to a practical test, might have them ever before him as warning examples, setting forth, as in a mirror, his own intellectual weakness, lest the mishap might overtake him of willfully abandoning himself to the company of the ignorant; for, in the forum of science, no other explanation of the lamentable misconception and persecution of this science, can be given, than to attribute them to a blind abandonment of one's self to these paths of error.

Were the fact not established, that the science and art of Homœopathy were rejected by the Professors of the great schools on the ground of such fallacies as these, it would be held impossible that teachers in Universities should really presume to know more than the daily practice teaches. The tendency of these fallacies arises from discontent that Homœopathy has sprung up, not from the barren soil of such men, but from the laboriously cultivated field of *practical physicians*. But these gentry *make public opinion*; they have patient, and, every year, new hearers, who, perfectly incapable of forming an opinion or judgment of their own, are the mere echoes of their teachers, hence all the more zealous and bigoted partisans, all their lives long, of the doctrines taught them.

But if one brings these Professors to a stand and calls them to account for their strife against Homœopathy, they avail themselves of the subterfuge that, for lack of evidence in favor of the truth of Homœopathy, they are unable to recognize it.

This declaration, now, is sufficiently characteristic; it does not give evidence of logical reflection; for, that a want of evidence does not affect the truth of a conclusion, this, one would think, "Professors of the High School" should know well enough; they surely should perceive, that, from lack of evidence they were only in a state of *doubt*, in which they could give no opinion worthy consideration; they should know that, in such a state, the result of their opinion could only be the expression "*we do not know it*," but not "*it is not so*," as Homœopathists assert it is, (Vide, *System der Logik: ein Handbuch, "für Lehrer,"* etc., von Dr. Jakob Freidrich Fries, Heidelberg, 1837, p. 140.) It seems that the stand-point of the Professors of the High School is unhappily such that we must quote a school-book to them.

§. 7.

But since a logical manner of thinking is evidently strange to these opponents of Homœopathy, controversies rage between these adherents of physiological medicine, who form the overpowering majority, and the followers of Hahnemann, who are in a clear minority; and this strife still rages, as unchecked as ever, now somewhat under the ashes, then again breaking forth with new energy, while the weapons which the physiological school uses in these controversies, disgrace more and more shamefully the medical profession, as well as medical science and art. However, this might be allowed to go on, if no one else should suffer thereby, and were it not exerting an infinitely injurious and disturbing influence upon the most important

interests of the rest of human society. This injurious influence must, however, itself have a powerful tendency to bring this strife to a settlement, in which strife, notwithstanding its surprisingly long duration, the minority has not only not given way to the majority, but is gaining more and more in the estimation of the public every year.

But if, in the following pages we search thoroughly into these controversies, it will be apparent that any thought of an immediate reconciliation between the extremes at present existing, by means thus far used, is utterly out of the question. On the contrary, here, in close connection to the laws of nature, the fundamental laws of physiology, pathology and therapeutics, as well as some important complements thereto, must develop themselves spontaneously from the solutions of numerous problems, whence every other composition of the strife must be superfluous.

All *conceptions* of our inner being are finally based upon the perceptions of our senses, by which they are created and deduced from external things even. But the formation of our *ideas*, *judgments* and *conclusions* is not permitted to take place at any subjective pleasure or caprice, but must result from determinate objective laws, inherent in the very things themselves and their constitutions.

The great question, however, is to arrive at an understanding as regards the conceptions, ideas, judgments and conclusions found in physiology, pathology and therapeutics, which are, by no means, all correct. This is all the more pity, since the whole of therapeutics rests upon diagnosis, indication and prognosis, and the solution of these problems is again simply and solely dependent upon just conceptions, ideas, judgments and conclusions, a requisition, which, unfortunately, has been hitherto overlooked or neglected, without exception, in all our therapeutics; as soon as this is carelessly neglected and not taken hold of with all the acuteness of the intellect, and prosecuted with all the vigor of an orderly and well-practiced mind, the whole success of medical art and science is unavoidably frustrated.

§. 8.

In the circle of natural phenomena, among which accidental diseases must be reckoned, as well as the processes of cure produced by art, every event possesses, on the one hand, a *conditional* necessity, since it can only result from its precedents and depends upon them; while, on the other hand, this conditional necessity itself flows again from the remote *unconditional* necessity of the original laws of nature and their recognized absolute truth.

But from these laws results the *existence* of no single event; for every one is composed of elements which have met accidentally or by means of experiment. Only the magnitude, the quality of their *composition*, thence ensuing, and their relations to other events and conditions, *i. e.*, the whole complexity of their existence, can be determined according to the laws of nature.

An *explanation* (Erklärung) according to the laws of nature is confined, therefore, to the course of events from given elements, and a *law of nature* is the form, by which the constant course of a natural phenomenon from given causes and conditions, may be expressed.

§. 9.

Let now one of the first scientific magnates of the day, as he is called, (Freiherr von Liebig,) tell us what a law of nature is.

On page 36, vol. I., Ed. 4th, of his Chemical Letters, we read as follows: "When the observer has learned the reason of a phenomenon, and he is able to combine its conditions, then, in seeking to reproduce the phenomenon at will, he demonstrates the correctness of his observations by *experiment*. To make a series of experiments, often means to separate a thought into its component parts, and to prove the same by a sensible phenomenon. The *natural philosopher* makes experiments in order to prove the truth of his assumption, he makes experiments in order to show a phenomenon in all its various parts. When he can prove, of a series of phenomena, that they are all effects of the same cause, then he arrives at a simple expression of the same, which, in this case, is a *law of nature*. We speak of a simple phenomenon as a law of nature, when this serves for the explanation of a natural phenomenon or of several."

"We refer, for instance, the rising of the mercury in Torricelli's tube, and the ascent of a balloon, back to the law that air has weight. But a single natural phenomenon is never, according to our experience, produced by a single cause, but always rests upon the combined operation of several laws of nature. The setting forth of the dependence of these natural laws is called the *theory* of the phenomenon. The theory of the barometer embraces three laws of nature; the law that *the atmosphere is heavy*, the law that *pressure on fluids operates equally in every direction*, the law that *pressure, acting in any direction, if it is not overcome by an equal counter-pressure, produces motion, which continues till the equilibrium is restored*. Upon this latter law, as well as upon the law that the air has weight, and, upon a fourth law, that *a body floating in any fluid, loses just so much of*

its weight as the fluid weighs which it displaces; upon these rests the theory of the balloon."

Do we know now what a law of nature is? At one time we are told that the law of nature *originates* in this, that we have observed by experimentation in a series of phenomena the effects *arise* from the same *cause*; at another time, however, this law is said to *serve* us in *explaining* one or more phenomena. Hence, in the first case, the law is to flow from experiment and observation; in the second, on the contrary, it is understood to exist previously in our consciousness before a phenomenon can be explained thereby.

Thus both cases exclude each other, and hence, taken together, they cannot be what we have to understand by a law of nature.

When Liebig sees the mercury rise in the barometer, he by no means sees, for instance, that air has weight, for weight is no phenomenon, and no object of sensible perception, and hence can be known only intellectually, only learned by *induction* from observation.

Herein consists the character of the *laws* of nature, that, by virtue of them we may explain to ourselves intellectually, not the existence, but the connection, of phenomena, by means of which we afterwards gain the perceptive reasons (*rationes cognoscendi*) as regards their development and conditions. The warrant for this lies not in the apparent properties of phenomena themselves, but in the immediate consciousness of the fundamental laws of nature, as of the law of causality, the equilibrium of action and counter-action, the constancy of bodies and forces, etc., as the ultimate reasons, in short, of which we can have any knowledge.

Neither does it suffice to prove that a series of phenomena has a common cause, in order to be able to define, from the simple expression of this cause, what a law of nature is; for, from causes and effects, we gain only categories of such laws of nature as may be arranged under the law of causation, but none which can come under the law of the equilibrium of effect and counter-effect, and none under that of the constancy of bodies and forces, etc.

Hence, if, in the foregoing, Liebig meant to give a definition of a law of nature, subject to no doubt, it is incorrect in many regards, for it refers only to the rules of experience according to the law of causation. The demonstration of the connection of such laws of nature under which Liebig understands, as we see, those obeying the laws of causation, is not the theory of a phenomenon, but, on the contrary, the theory of a science *in which the phenomena can be recognized in their subordination to the laws of nature, and thus the connection of the phenomena can afterwards be explained by these laws of nature.*

Moreover, a phenomenon never serves as a law of nature by which other natural phenomena may be explained, else I must be able to explain the lightning from the thunder; however, even if I can explain to myself the thunder from the simple phenomenon of the lightning, yet the lightning is no law of nature, for all that.

Liebig is also in error in maintaining that a single phenomenon of nature is *never* produced by a single cause, but that it depends, on the contrary, upon the joint effects of several laws of nature. Hence, the remarkable feat of making *cause* and *effect* to be the same thing.

But laws of nature, in general, are *laws of experience* with regard to the necessary course of phenomena, from given elements; that which, however, *changes* the regular course of events and states, results in consequence of a cause.

If I put a spark of fire into a barrel of powder, then this spark is the *simple and sole cause* of the instantaneous *change* of the original state of the constituents of the powder, and this state presented the necessary conditions for the change. If a vessel moves with the rapidity of the current of a stream, and suddenly comes to a standstill, that has always but *one single cause*, for example, the object upon which it struck; while the current of the river and the construction of the vessel, which is lighter than the water, offer the necessary conditions thereto; for the conditions must, necessarily, be given *before* an accidental cause can change their motions.

Hence, Liebig confounds also the causes with the conditions.

For, that the column of mercury in the barometer undergoes a change in its position, *must, of course*, have a *cause*, for only the change in the status of a thing, prompts the inquiry after a cause, and this is answered here according to the law of causality. If the physical *conditions* are given, and the construction of the barometer, and given for the purpose also that the weight of the column of mercury may stand in equipoise with the weight of the atmosphere, then every *change* in the position of the column indicates that the *only cause* of this phenomenon in nature lies in the varying weight of the atmosphere.

§. 10.

What is now the reason which leads Liebig to declare that a single phenomenon is, according to our experience, never produced by a single cause, but always depends upon the combined action of several laws of nature?

To answer this question, we must consider the fundamental law of the constancy of bodies and forces, and that of reciprocal action.

We ask Liebig, for instance, in what Hydrochloric acid consists, and he replies, 97.76 of Chlorine and 2.24 of Hydrogen.

This, experience with the balance, teaches to Chemistry.

From similar investigations, in great numbers, it drew the inductive conclusion, that, in every chemical union, its several constituents are present in unvarying proportions, and, in the same proportions, enter into more complex combinations. These empirical facts lead to the law of specific weights and equivalents.

But Chemistry has, hitherto, neglected to seek the ultimate *legitimate* cause of this; it rests in the natural law of the *constancy of bodies and forces*.

All bodies in nature remain, in conformity with this law, the same under all circumstances, else there could be no analysis, no chemistry. Chlorine remains Chlorine, Hydrogen, Hydrogen as long as the world stands; only in combination with other bodies do they change their forms and enter into other combinations, as Chlorine and Hydrogen into Hydrochloric acid. Were this law of nature not given, then Chemistry, *with its balance*, would have discovered nothing.

If we, by experiment, combine Chlorine and Hydrogen to form Hydrochloric acid, the *causes* of this result lie in the art of experiment to *change* states; the *conditions* for the change lie in the specific affinity of these bodies to each other and to other bodies; the *effect* thereof, in the changing of their two states into the single one of the specific form of Hydrochloric acid.

In order to explain this complex result, according to the laws of nature, many laws of nature, it is true, come up for consideration; however, we see already in this simple example of the barometer, not only causes and effects, but conditions and reciprocal causalities, thus at the same time the law of the equilibrium of effect and counter-effect, or, in brief, of reciprocal action.

§. II.

But there is a *mediate* and an *immediate* reciprocal action of bodies and forces. Within the human organism, these bodies and forces act *immediately*, the one upon the other; in a mechanical construction, only *mediately*.

The difference in the reciprocal action of inanimate machines, and, in that of a living organism, consists in the first place, in this, that the motion of all parts of the machine depends, at every moment,

upon the *force of the external cause* only. In the machine, the external cause contains the *active* momentum which may equally diffuse itself through all its parts, only for the reason that the machine itself remains passive to it, so that all its motions are made the more readily, the fewer obstacles the construction of the machine presents to its motor power.

If the machine could supply itself with oil, and repair the losses which it suffers from friction, rust, etc., then it would no longer perform its motions *mediately*, from mere external causes, but *immediately* out of itself, by virtue of the *living* fellowship of all its parts.

Secondly, it is true, we see external substances and their forces received into the organism also, yet not as sole causes of motion, but only for the nourishment of the parts in constant activity. But substances brought into the organism from without, ever remain *passive* within the organism, while the organism towards them is *active*; for substances from the external world, do not pass into the blood spontaneously, nor do they in the blood spontaneously change into bile or urine, but this happens by virtue of *living* reciprocal causes and effects residing and taking place within the organism, according to determinate specific laws.

The machine knows no necessity for motion or nourishment, but the organism does, and this necessity has its source in those very reciprocal causes and effects, which again are the reason that man engages in the chase for food. Again, the kind of supply, both for the machine, and the organism, is furnished through man; hence, the machine, regarded in every light, is the complete opposite of the organism, and the inanimate whole of a *mediate* reciprocal action, brought about from without.

§. 12.

Thus now even the Barometer is a physical instrument, like every other machine. Every machine is the form of the whole of a mediate reciprocal action of its parts, one upon another, and the construction of these parts must contain the *conditions of the possibility* by which it can be set in motion by a *cause*, be it weight, elasticity or steam power.

The construction of the Barometer, and its state, give, therefore, the conditions for the reciprocal action of its column of mercury with the atmosphere. By this construction, the form of the mediate reciprocal action between the *constant* weight of the mercury and the varying weight of the air, becomes possible, by which the *cause of the change*

in the position of the column of mercury is *simply and solely* the varying counterpoise of the atmosphere. The quantity of this change is hence measured by the *constant* weight of the mercury.

Every *change*, therefore, presupposes something *constant*, *i. e.*, an *object with at least two opposed tendencies*.

Thus it is proved that to Liebig, all these essential differences are unknown, and, in this, that question is answered.

Finally, the *laws of nature*, under which those changes of motion in the barometer occur, and can occur, are *not three merely*, but a good many more, among which, at least, belong the laws of capillary attraction.

§. 13.

L I F E.

What, now, are the causes and conditions of Life, in health and in sickness? Even upon these questions, the views of the Physiological school and the Homœopathic, are far apart, and still farther apart as regards the causes and conditions necessary for the attainment of health when sick.

Since nothing can be measured by itself, the doctrines of Homœopathy are most briefly and clearly set forth, when they are compared with those of their opponents, upon the ground of the laws of nature, and Homœopathy is fortunately in such a position that it can endure this comparison with advantage. It is only by such a comparison that we can settle, conclusively, what we mean by ideas which are used by both sides, often in the very same words, in order to designate different objects and events; otherwise, even in a scientific point of view, we should see no end of the strife, as, even in Mathematics, the strife over the quantity of force, sprang only from this, that the contestants did not agree about the meaning of terms; for it continued till they learned to discern that a force was represented, not merely by the body set in motion, but also by the amount of motion which the force produced in a given time.

§. 14.

The fundamental physiological views, which are held forth at the Universities, are sufficiently known, and I shall only take up those here which are peculiar to Virchow. What he teaches about the *cell*, as the elementary part of life, are facts of direct perception which constitute the extreme limits of that kind of knowledge of the physiological school. But this does not suffice for Therapeutics at all; however it may satisfy Physiology, Therapeutics must reach further than the physiological observations of the dominant school go. He nowhere gives us any intimation touching the chemical composition of the cell, and, as regards its physical peculiarities, his statements are extremely vague. Regarding the nature of the cell, we learn nothing, nothing of its matter (*Stoff*) and forces in the various organs, tissues, etc.,

either in its physiological or pathological state. Hence, all therapeutics, all operating upon such a structure by remedies, must logically be declared nonsense. He speaks, it is true, of molecular forces, but not of molecular substances. He opines only that since the *vital force* would be gradually exhausted by the resistance of *matter*, we must, therefore, suppose that this is continually regenerated by the molecular forces; that it constantly receives reparation from the molecular forces; that it is strengthened by these; he speaks "of a *certain independence* of the cell which qualifies it to supply its own necessities to a certain extent out of itself," and maintains "that Radicalism, which seeks the mechanism of Life only in the reciprocal action of those *molecular forces* which are immanent to the particles (molecules) of the organic elements (cells) is not empiric, hence is illogical. He thinks "that there must be certain external influences which call forth and sustain the vital movements of the cell. These might be called *vital irritants*, which maintain in constant activity the *tension* (Spannung) of the most minute particles, and we might assume three irritants according to the three directions in which life manifests itself, to wit, *nutritive, formative* and *functional* irritants."

Regarding the cell itself, he says, "the relatively permanent parts of the cellular elements are the membranes and the nuclei; the more variable, the cell contents."

"If the membrane exerts a certain *elective* influence upon the transit of matter from without inwards and *vice versa*, the nucleus is, notwithstanding, that formation which arranges the matter within the cell, and serves as an internal centre of attraction, as the true central point of the sustaining activity; the contents of the cell, on the contrary, form the relatively varying elements between nucleus and membranes." Besides the molecular force and the vital force, Virchow has, for the explanation of life, "a still *more noble* vital force in a higher sense, a penetrating force," and, aside from molecular forces of the cell, Virchow has cell-forces of which he says that we may comprise them, perhaps, under the term "vital forces in a *more extended* sense of the word." But this is not enough; he knows yet other forces. "Rest is death; life presupposes unrest," he maintains, and only as long as the internal motion of the substance continues in the appointed direction which is established for it in the *typical* limits of the individual, does life continue. The *nature* of every *motion*, however, requires *change*, whether of space or matter, and since we treat here of a motion essentially internal, which, for the most part, is accomplished by setting free, and rendering active, *latent forces*, it is self-

evident, that a change of matter takes place and new material must be subjected to motion."

§. 15.

Regarding the idea of *health*, Virchow expresses himself thus, as he proceeds: "Hence, with all the independence of the elements, their reciprocal dependence explains itself, and only by their co-operation, by the affinities and repulsions of their matter, by their changes as to *space*, are they able to maintain the integrity of their composition, to cast off what has been used, to obtain what is needed, and finally, in the entire sum of the elements which compose the body, to maintain the *equipoise* of functions which we group together in the *picture of health*, and which we perceive in ourselves with a sense of comfort."

§. 16.

No one will deny that these views and *definitions of ideas* are set forth ambiguously and subjectively to the last degree, and that they leave behind them the greatest room for doubt.

The knowledge of Nature, however, does not consist in a recording of facts and representing them under arbitrary views, but in the connection of facts with *laws* which express the form of their *necessity*. These laws are not the object of any mediate sensible perception and representation; they do not arise from any sensible science; either from Physiology, Pathology, Chemistry or Physics; on the contrary, these sciences rest on these laws; for the source of all our knowledge of Nature is two-fold; first, the knowledge of the facts, then the insight into the necessary laws in accordance with which they occur, and the two stand side by side with the same *objective* value. Thus, from the law alone, the *actual* never can be made out, and no fact, by itself, can be set down as necessary; but only when a fact is given, can its necessary consequence, according to law, be determined.

Thus the *law of causation* tells us, in considering the succession of two different states of the same body, that no effect can arise without an *external cause*, and that the *effect* itself may, in its turn, become a cause.

The law of *vis inertiae* requires us to consider the changes of bodies in nature as the effect of an *external cause*, for, without this, all bodies in nature would remain in the same state in which they were placed.

An effect upon a body, according to the law of causation, without

this *vis inertiae*, would, hence, be inconceivable. Without this law, for instance, the study of the pulse would be impossible; for the state, the peculiar motions of objects must be first given, before we can perceive changes in them. Hence, the reasons of the states in which our organism remains, are the *conditions* under which, simply and solely, it can be *changed* by any external cause.

That we must, in medical sciences, discriminate rigidly between these two relations of state and change, according to these two laws, is as clear, as every therapeutic attempt without it must be obscure; thus, for instance, no cure could be predicted, if we had not previously taken the material which we may acknowledge as curative agents, as external causes, in order to infuse them into our healthy body, in its various conditions, as regards age, sex, constitution, etc., thereby to change these conditions and thus to learn the changes wrought by these substances.

But, in order that we may be able to form a correct conclusion in this respect, it is first essential that we should know that, according to the law of constancy of substances and forces, in all the universe, there is no atom, with its unchangeable chemical and physical powers, which ever ceases to exist, however many forms it may be compelled, by external circumstances, to assume in the rounds of nature.

As now, on the one hand, according to the law of constancy of substances and forces, every thing which changes is stable, and only changes its conditions, so, on the other hand, the *co-existence*, *i. e.*, the existence of manifold things at the same time, the community of parts in the whole, is a *reciprocal activity* of the permanent influence of substances upon each other, in the *interior of our organism*; evidently thus a balancing of effects and counter-effects going on in the constant alternation of mutual causes and effects; hence a reciprocal action.

None of these laws are to be inferred or deduced from other principles; they can only be learned by *thinking*, and consequently are *fundamental laws of nature*.

Hence they are valuable as most important premises in the natural sciences to which Physiology, Pathology and Therapeutics, belong, and every natural Philosopher, consequently every physician, knows, or should know, that he can never make any experience which runs counter to them; at the same time he should know, however, that such laws, although not given by experience, nevertheless prove their truth and objective validity at all times by experience.

§. 17.

Forces are properties of bodies, which may be divided into *changeable* and *unchangeable*. Properties of bodies which can only be conceived of from the existence of the bodies, which isolate them perfectly from other bodies, as regards quality, and which are necessary and constant, hence specific of bodies under all circumstances, these only can we call *forces*, as, for example, the property of each single element by which it determines the constant equivalents of its combination with hydrogen or oxygen; the specific gravity of each separate body, the specific qualities even of organic forms, etc. But, if we see a change in bodies produced by any external cause, it is evident that this can take place at first only within their changeable forces, that is, within their different properties, as their volume, density, color, their various manner of chemical combination, etc.

Hence, should we, with Liebig, speak, for example, of a peculiar *chemical* or *physical* force, we should not thereby extend our knowledge at all; these ideas are mere generalizations, without any definite limit, mere inventions of our reflective faculties.

The *basic forces* of matter, however, are properties of its masses, immediate and inalienable, which are divided into forces either of *repulsion* or *attraction*. Both may operate either at a distance or by contact. Since, now, every action in nature is reciprocal action between bodies (in nature,) such a basic force of the motion of a body does not belong to the body alone, but belongs to it *in the ratio of its relations to other bodies*, and here we find that the like repel, while the unlike attract, each other. Every form of an organic reciprocal action is hence called a *process of nature*, in which, so long as it continues, its atoms and their forces *must* constantly remain in the equilibrium of rest or motion. Every whole stands, on one side, under the conditions of combination; on the other side, the combination of its parts creates a *dependence* of the parts upon each other, and upon the *specific* form of the whole.

Hence, there are no *simple cells*, although Virchow declares, "there are *simple* cells containing a solution of albumen holding substances with a small quantity of salt and fat, and *specific* cells, in which *especially* substances capable of action are formed as the material of muscles and nerves. The latter, it is presumed, sustains the *functions* which are essentially connected with their specific contents. But besides functions, they also possess the capability of nutrition and regeneration, so long as they have nucleus and membrane." Mere assertions with exceptions.

Abstract atoms and mathematical points are *simple*, but nothing is

simple which is composed of chemical elements. The difference between simple and specific cells cannot be established by natural law; for it can only give cell-forms which are *homogeneous* according to number, which differ, however, from others, according to kind, and hence specifically. Not only is the muscle and nerve-cell specific, but also all other forms of all organs and systems are specific, and the *homogeneous* in them all is the *fundamental law*; their *fundamental forces*, however, are different according to their form and composition.

Even the supposition of an *elective* influence of the cell membrane upon substances passing toward the interior, or *vice versa*, and presented from without, contradicts, likewise, those basic forces of matter. For, even for the constituent parts and molecules of cells, there can be but forces of attraction and repulsion, by contact and at a distance, which are dependent upon *volume*, *density*, *form*, and upon the chemical *composition* of their parts. Now, since attraction can only take place between two heterogeneous parts, the cell can have no choice, but must necessarily take from its surroundings everything which is heterogeneous to it, and must expel again everything which has become homogeneous to it.

It is true there is a reciprocal motion between the cell and its surroundings, and one within its interior. This is, however, only an *effort towards circulation*, according to the law of reciprocal action, and this effort comes to the cell from a series of events which have preceded it (the cell) and which have necessarily determined its definite state of formation.

From its form, density, volume, and chemical constituents, which it has thence received, the power is given it to carry on its formations and transformations through a determinate series of formative changes. The law of its reciprocal action depends, therefore, entirely upon its specific *entire form*. Every cell-form elaborates the matters presented to it, in the intercellular substance, in a specifically appointed manner, and, compelled by the same necessity, it acts again specifically upon its surroundings; and where the cell-life shows itself most active and vigorous, there decomposition goes on most rapidly, and *vice versa*. Were this not the case — did the cell possess only an elective, and thus an arbitrary power over its surroundings — a disturbance of its life would be inconceivable, it would live forever; and, just *because* the cell does *not* possess, according to the laws of nature, the power to draw from its surroundings, merely according to its choice, the materials for its nutrition and the performance of its functions, just for this very reason, if those materials are not presented to it which it can attract, by virtue of the laws of the specific form of its reciprocal

action, then it must become diseased. In the capillary vessels of the lungs, for instance, the blood-cell throws off carbonic acid, and attracts in its place oxygen from the air; in the capillary vessels of the aorta, however, it throws off oxygen, and attracts in its place carbonic acid; and no one would like to assert that this counter-action, going on in the blood-cell, was an act of its own choice.

§. 18.

Virchow separates the so-called *vital force* from the molecular and other forces. The idea of a vital force is not yet dead. Life, however, means the self-acting form of a totality of reciprocal action; by *force* we understand the property of a body in its relation of cause and effect to another. Now, some hold fast to the idea of *force*, and develop their proof against the vital force from the law of constancy of matter and force, and, indeed, quite conclusively; others, however, draw their proof from the law of reciprocal action; and they likewise are right enough, in so far as they set out from the idea of life.

The opponents of the vital force appeal to this: that there is no beginning or end of matter, for this is eternal and changes its conditions merely, *i. e.*, one manner of existing is the cause of another, and an immaterial cause is inconceivable; for all life is a manifestation of matter. Those who hold fast to a vital force refer to the co-existence of the manifold, to the change of formation and transformation under the ægis of a higher agent, which transplants itself from father to child. This is clear from the analysis of the words vital force, which comprehend two ideas of relationship contradictory to each other, for there is only a *possibility* of living according to the reciprocal action of substances brought in contact and their forces.

For the study of Therapeutics, it is needless to invoke the aid of a vital force. This idea cannot even be elevated to become the basis of a physiological explanation, and rather remains itself a problem, since no object can be defined by an idea.

The strife turns upon two opposite pivots: Some of the contestants occupy the standpoint of perception; others move in the realm of reflexion, as regards a subject which cannot be given in the shape of definite knowledge, and is an incomplete thought, like any other transcendental idea.

Virchow, however, likes ideas of relation, which never have any real substance, but, apparently only, sustain this or that opinion, and which can only state relations arbitrarily assumed, such as these: "The vital force even in a higher and more extended sense," "forces of a

nobler kind," etc. The world of phenomena, it is true, seems to contain the world of things in the ideal also. If we expose this pretence by the natural laws of criticism, then this strife disappears in the two diverse views of the world—in the natural (*i. e.*, the one based on Nature's laws,) and, in that quite distinct therefrom, the ideal.

§. 19.

Thus the matter stands, also, with the various other forces which Virchow sets forth, as with his molecular force. It will be more useful, however, to gain, for the molecular motions, a more practical value as regards therapeutics and a more material basis.

Physiological chemistry presents evidence enough that, in the inner organism, *mutatis mutandis*, the same physical and chemical laws prevail as in the outer world.

The division or separation of an organic compound into more simple combinations, under the influence and contact of some other definite matter, which is usually called *ferment*, is that process which is designated as *fermentation*. Under the influence of a ferment contained in the tonsils, and the ferment of the saliva, Salicin, for instance, which physiological medicine often uses in intermittents, is separated into Saliretin and Grape-sugar.

But *putrefaction*, also, not unfrequently occurs in the organism—the decomposition of nitrogenous organic matter.

As regards these occurrences in the organism, the following, among other deductions, may be drawn from the exact experiments of Dr. M. Traube, which have now been made for some years:

1. Organic bodies putrefying in the air, have the property of readily absorbing oxygen from the atmosphere, and of throwing it off to other bodies.
2. The transition of oxygen to other bodies, produced by such elements, rests upon the *succession* of their *oxidation* and *reduction*.
3. If no body is present which is capable of reducing putrefying and fermenting matters, then they use the absorbed oxygen for the oxidation of their own substances: they develop carbonic acid.
4. If it is established that the putrefaction of albuminates is nothing else than their decomposition with water, then it must follow as a second deduction therefrom, that they (the albuminates) possess the power, even within the organism, to decompose water, and to beget ferments, which, however, being formed under peculiar conditions, must have also other properties and another composition, than the usual putrefactive ferment.

5. If the albuminates generally have the power in ordinary temperature, and still more, in an elevated temperature to decompose water, this does not show us why they should lose this power, resulting from their molecular decomposition in the organism.

6. The most, and perhaps all the ferments which we find in the organism are nitrogenous.

7. The albuminates must enter into the most active processes of transposition in warm blooded animals, under that temperature which, according to all experience, the most accelerates their spontaneous decomposition. In fact, in warm blooded animals, in a relatively short space of time, enormous quantities of ferments are formed in the salivary glands, in the stomach, in the pancreas, liver and blood. But we find, in them, products of decomposition going still further, as leucin, for example.

8. We know that the *non-nitrogenous* are organic bodies utterly passive, bereft of the possibility of decomposition with water under ordinary temperatures. Nevertheless, we see these materials (non-nitrogenous) constantly suffering changes in the organism, which changes, on closer examination, always present themselves as produced by nitrogenous ferments, just exactly as, out of the organism, it is the nitrogenous ferments arising from the transposition of the albuminates, which produces the metamorphosis of non-nitrogenous bodies.

9. Many, perhaps all ferments, have, under ordinary temperatures, a strong reducing power, and possess it in a higher degree than all other organic combinations.

10. The property of putrefying matter, to deprive other bodies of their oxygen, has long been known. The strongest affinities are overcome by this power. It is probable, that all other ferments, occurring in the organism, as well as yeast, have *reducing* properties.

11. The ferments possess the property of giving up, to a third body, the oxygen taken from other bodies. Not only the ferments, but other combinations also, have the property of giving, to a third body, the oxygen taken from other bodies.

Sal ammoniac and the *Tartrate of ammonia* render difficult the reduction of the Oxide of copper and Sulphate of indigo, probably because, by their attraction they render difficult the *decomposition of water*, to which (attraction) they probably owe their antiseptic power.

12. Related to this species of peculiar phenomena of affinities, is the observation of Schönbein, that the Oil of turpentine, which, under the influence of sunlight takes up oxygen, may give it off, not directly, but under the influence of blood corpuscles, to *Tinct. Guaiac.* A

similar relation has been observed between the Oxide of bitter almonds, solution of Guaiac, and blood corpuscles.

13. The peculiar processes of the transference of oxygen, have their basis in *resistances which oppose the direct manifestation of affinities* and demonstrably appear, not merely in putrefactions and fermentations, but also in other chemical processes.

14. We must assume three different kinds of such resistances, which oppose the manifestation of affinities. 1. *The resistance of elasticity.* 2. *The resistance of the cohesion of solid bodies.* And, 3. *The molecular resistance* which is given in the arrangement of the atoms of a molecule.

15. The repeatedly substantiated fact that Indigo is eliminated, as Indigo-white, through the arterial blood into the urine, is an experience, which cannot be explained by the energetic processes of oxidation in the blood, and points to a process of *de-oxidation* going on in the blood. (Benzoic acid, also, and Uric acid, are reduced, by the activity of the human organism, to Hippuric acid.)

§. 20.

This subject is too little considered in Physiology, Pathology, and Therapeutics, yet of too much importance to allow it to pass without a practical example from the same learned man.

“According to the thorough experiments of Magnus, who first taught us the changes which the arterial blood undergoes in the capillaries, this blood, while passing through the capillaries of the muscles, and through the carbonic acid which is always present there, sets at liberty a part of its *oxygen*. The process here is the reverse of that which takes place in the capillaries of the lungs, where the oxygen inhaled expels *carbonic acid*.

The oxygen, set free, passes, in a state of solution, through the walls of the capillaries, and unites itself with the muscular fibre *in a loose chemical combination*, which is prepared to *surrender* this oxygen thus taken up, to other matters in solution in the muscular fluid, which have a stronger affinity for oxygen, and then, to take up oxygen again anew. The process here is the same as with all the processes of putrefaction.

The muscular fibre, according to this, bears the same relation to the reducing substances on the one side, and to oxygen on the other, as Indigo, Nitrous oxide, the sulphates of the copper oxides, acetous ferments and many other substances.

The de-oxidation of the muscular fibre, however, goes on with the *greatest intensity* by the interposing action of its proper nerve. If this is irritated, then the chemical process of the de-oxidation of the muscular fibre is accompanied by a physical change in the attraction of its molecules, which announces itself as contraction. This difference of the conduct of the muscle undergoing de-oxidation, *under* the concurrent action of the nerve and *without* it, calls vividly to mind the behavior of Zinc, as regards its chemical action, with and without the contemporaneous influence of a negative metal.

If the Zinc is simply dissolved in an acid, it gives off heat only; but, if the action of Copper intervenes, then the molecules of the copper are brought into galvanic action, while the *chemical* process itself is not changed, but only *accelerated*. While amalgamated Zinc is scarcely at all affected by diluted Sulphuric acid, its solution takes place with great energy under contemporaneous action of a negative metal.

The muscular fibre itself loses its oxygen, more or less, through the process of contraction, according to the energy and frequent return of the nervous irritation, and would finally lose, under complete de-oxidation, the faculty of farther contraction, if it did not constantly receive fresh supplies of oxygen. In fact, in the very muscular action itself, lies the cause for an increased supply of this gas.

Since, for instance, the working muscle, by its oxygen, oxidizes more combustible matter within a given time, and consequently produces more carbonic acid than in a state of rest, the increased quantity of carbonic acid must also expel more oxygen from the arterial blood.

By very severe and continued labor, so much oxygen is at length used, that the respiratory apparatus can no longer supply a sufficient quantity of this gas for continued labor.

Besides this, so much carbonic acid is produced, that by its exit from the blood and entrance into the cells of the lungs, it even renders the entrance of oxygen into the pulmonary capillaries difficult. Then ensues, as always is the case when there is lack of oxygen in the blood, shortness of breath, and, at the same time, and from the same cause, incapacity of the muscles to continued energetic contraction, till the blood gradually relieves itself of its carbonic acid, the respiration assumes again its equilibrium, the muscles are again supplied with an abundance of oxygen, and can again resume their labor.

When fully saturated with oxygen, the muscle is most ready for contraction and exertion. Its complete de-oxidation, on the contrary, corresponds to the state of the *rigor mortis*. *Warmth* must hasten

the rigidity of the muscular fibres; *cold* delays it, as generally, indeed, an elevated temperature produces an essential acceleration of all processes of putrefaction.

The access of oxygen must again relax the *rigor mortis* as long as the muscle has suffered no other change by reason of fermentation. In all cases, however, this rigidity gives way without the access of oxygen, upon the occurrence of the mortification of the de-oxidized muscular fibre.

By the de-oxidation itself, even the *physical* properties of the muscular fibre are changed; it is harder and less transparent than when supplied with oxygen, as, in general, de-oxidized substances are essentially different from their oxides, as, for example, Indigo-white from Indigo-blue.

Hence the *fibrinous body* contained in the muscular fibre is a *vital* putrefactive ferment, which carries the oxygen, received from the blood, to the substances dissolved in the muscular fluid, *but at the same time thereby suffers no destruction itself*. The chemical change, during the action of the muscle, does not concern the organic part of the muscle, insoluble in water, but the substances dissolved in the muscular fluid.

§. 21.

The experiments of Pasteur confirm and illustrate this subject from another, no less instructive side. It is especially interesting to observe, that, under certain circumstances, several kinds of cells, specifically different, may exist in fermenting fluids, of which cells some always strive to appropriate to themselves the nutritive matter of others, in which case the *acidity* and *alkalescence* of the solutions are of the greatest influence. Pasteur discovered, also, the arising of a second ferment, when more yeast is taken than is necessary for the fermentation of a certain quantity of sugar; the yeast, at first, consumes the sugar presented to it, but thereupon also decomposes the sugar present in its own constituent parts, that is to say, the already decomposed yeast-cells, furnish those substances which serve as nutriment for the newly-formed cells. The first generation requires oxygen, while the second is destroyed in it, and both generations present different species of Vibriones.

All these examples teach, that all protozoa, all vibriones, etc., and all cells of every kind, are hence products of still more *simple matter*, and even, according to my previous declarations, as well as according to Dr. Brücke, are of much more complicated formation than one

would suppose from Schwann and Virchow. According to Brücke, also, and in accordance with my experiments already given, a determinate molecular construction pertains to all microscopic forms, and indeed is so complex that we must indicate it by the term *organization*.

All these facts give us a far deeper insight into the laws of cell-life than the theories of Virchow, heretofore promulgated.

§. 22.

A new and far-reaching discovery of Dr. F. Grohé, in the year 1864, must yet be mentioned.

The fermenting influence of saliva and the pancreatic and intestinal juices upon the carbo-hydrates supplied from without, is well known, and the fact is established that the metamorphosis of the carbo-hydrates, within the body, takes place in accordance with the same laws as it does outside of it.

But, according to the investigations of Grohé, the *ferment of the chyle* also presents a great analogy with the ferment of the saliva, pancreas and liver. The chyle of the thoracic duct contains, during digestion and absorption, *cellular elements* from the lymphatic glands, which, introduced into the blood, are distinguished as colorless blood-cells; and Grohé presents evidence to this effect, that the lymph-cells and white blood-cells stand connected with the fermentative processes of the blood, while the red blood-cells mainly operate as bearers of the *oxidizing* oxygen. The chyle possesses a saccharifying property, and the flow of chyle and lymph serves, together with its other functions, as a constant source of a ferment for the blood and the various organs, especially the liver.

The transpositions of the ferment in the animal organism hence show the greatest accordance with the processes of fermentation.

Since, finally, the contents of the cells and the inter-cellular substance stand in such a close reciprocal action to each other, so, even here, neither the lymph nor the chyle *cells* form the effective part, but the substances contained therein, out of which they are composed, *i. e.*, the nutritious matter assimilated in the intestinal canal, and the material of the active digestive juices in connection with the oxygen brought from the lungs.

It is clear, from the foregoing, that the existence of the organism is *closely connected with the processes of the oxidation and reduction of the materials introduced into it*, with a mutual, and in general, two-

fold function of its various formations (Gebilde) existing for this purpose.

This suffices to indicate, at the outset, that, although no text-book of Therapeutics treats of the constant alternation of oxidations and reductions of matter within our organism, it will yet be seen, from what is to follow, that this alternation forms the *material foundation*, not only of Pathology, but also of Therapeutics.

In a *quantitative* respect, the *influence of contact* is yet to be discussed.

These materials, of which we have just been speaking, do not thus act chemically, nor according to the laws of chemical affinities. They need to be present in *very small* quantities only, to force the greatest quantities of organic combinations, qualified for this process, to their own decomposition. Hence, they do not always combine chemically with those bodies, or the products of their decomposition, and the changes which they cause often occur suddenly and often not till after a long period.

The mere presence of organic substances induces, therefore, such decompositions. The powder of Gold, Platina, Silver, the peroxide of manganese, or the Oxide of lead, decompose the hydrate of the peroxide, even of the human organism, into water and oxygen, without the latter going over to the former. The most *minute subdivision* favors this phenomenon, and the addition of a *minimum* of Sulphuric acid suppresses it. If we expose, for instance, a watery solution of Spirits of wine to the atmosphere, it does not combine at all with the oxygen of the atmosphere. If it falls, however, in drops upon Platina powder, it takes up the atmospheric oxygen actively and at once. Hence the Platina produces this effect, that the previously unexcited oxygen becomes excited, and receives oxidizing powers which it previously lacked.

Many drugs return through the urine and the sweat *unchanged*, as is well known, hence they can only have acted through the influence of contact, and produced cures in this manner.

All these are facts which give us the deepest insight into the economy of the organism, and advise us, as regards therapeutics, to take our measures in strict accordance thereto, before we throw ourselves blindly into the arms of an empiric or merely traditional method of treatment, which considers the organism as a mere retort, in which we must produce great secretions by means of great quantities (of drugs), whereas almost all interchange of matter rests upon the change of oxidation and reduction, which is induced by the influences of contact.

What now does the life-force accomplish in all these processes?

Life and living is that which has the ground of its activity in itself: while a machine, which is likewise a form of reciprocal action, does not receive its motion from the forces of the iron, supposing it to be made of iron. It is dead; it is under the power of the law of *vis inertiae*; but when we see an organism, which is itself the cause of effects which it can produce only by the help of certain influences upon it, we ascribe to it a *power* so to act. Hence it (the organism) is an excitable cause which possesses self-activity in combination with receptivity or excitability. Thus our body possesses the capability of growth; it develops its very form from its germ, but only when it is excited by the influences of heat, light, and the reception of nutriments to this development.

This excitability is nothing but the receptivity for outer and inner irritants; the cause of every *inner* activity is not any longer something *accomplished* from without, but something produced within, and the interchange of these internal activities occurs without our aid.

Hence, in all the functions of the organism, we observe a state of *rest* or of *movable equipoise* — of tension, upon which that of motion may follow. Rest is not, therefore, as Virchow has it, identical with death of the organism; on the contrary, the law of *self-preservation* announces itself here, *i. e.*, the law of the *periodical return of organic activities, of reproduction*, or the periodic return of a play of reparation and exhaustion in a round of reciprocal action.

If we imagine a system of organs, as our organism, in which these organs stand to each other in certain relations of space, and, under the influence of their reciprocal forces, are reciprocally brought into motion, from which motion they pass again into certain other conditions, as the diastole follows upon the systole, expiration upon inspiration, after a longer or shorter period of rest; then we might consider these functions as a certain mechanical labor, but as a *two-fold* labor, from zero upwards, and again to zero downwards, in which, however, the zero should not represent the negation of motion, but a living *strife*, which, for a conceivable point of time, has not yet set itself into motion. The forces of labor which are thus attained and used, may be represented, as is well known, as a weight raised to a determined height. Moreover, we call the forces which strive to move the point, so long as they have not completed this motion, *forces of tension* (Spannkkräfte), and the state of rest, *tension*. Tension is here equal to subsided motion, for the purpose of a new charge, and the same as

resistance. But to all powers of labor consumed by relaxation, an acquired equivalent of imponderables always corresponds, as *warmth*, *electricity*, and *magnetism*, the sum of which must always be supplied by food, drink, and atmospheric air, *so that this sum also, always remains constant*. Thus is the *law of the equivalence of forces* of the organism expressed.

Material obstacles of various kinds lie in the way of this alternation of tension and relaxation. We have already spoken of the obstacles of elasticity, cohesion, and molecules, and we shall anon come to treat of the diosmotic obstacles; here we introduce an example of excitement and depression (Hemmung) in the nervous system, from the experiments of von Bezold.

"We can form an idea of the process which takes place in the heart, by means of simultaneous activity of the spinal marrow and nervus vagus.

"Let us imagine that the ends of the vagus are interposed between the origins of the motor nerves, arising from the cardiac ganglia and their terminations in the muscles of the heart. By some kind of interference, an obstacle is interposed between the point where the source of the rhythmic excitement is to be sought, and that where its activity is manifested. This obstacle will delay the irritation coming from the cardiac ganglion, until the excitement has risen to such a pitch that it is no more to be restrained thereby. The nervous excitement is interrupted, somewhat as the steam, when raised to a certain degree of tension in the boiler, will open a valve closed by a spring or weight, and, in proportion to the amount of excitement actually present, will a pulsation more or less forcible take place. But the checking force of the vagus is in operation again now, the supply of excitement has diminished by reason of its passage to the muscles of the heart; again the spring, rendered extremely tense by the irritation of the vagus, closes the valve; after the contraction, a pause follows, the length of which will depend upon the time which the excitement in the heart occupies, in order to overcome the obstacle lying between the very ends of the nerves and their starting points. At the instant the valve yields again, the second pulsation occurs, the strength of which is evidently proportional to the actual amount of excitement which has been stored up during the closing of the valve."

Analogy perfectly unites the facts which von Bezold discovered by his experiments regarding the antagonism between the motor and checking (depressing) nerves. He had ascertained that the frequency and the force of the contractions of the heart depended, in a great degree, upon the condition of the medulla oblongata and cervicalis;

that the *exciting* system of the heart lies in the spinal marrow, the *regulating* in the vagus, etc., all facts of two-fold, opposing motions, important, not only for Physiology and Pathology, but also for Therapeutics, which are not to be explained by the idea of a life-force, or a penetrating force, or any other force of Virchow.

§. 24.

Before we can form ideas of abnormalities and diseases, we must set forth clearly the nature of the *normal* and *healthy*. Virchow's definition, just given, only presents an *idea* of a *picture* of health.

Should we desire to seek in an empirical manner, a normal proportion of any sort, we must necessarily deduce it from proportions of the same sort, diverging from one another, as the physiological school has heretofore done, and thus fallen into devious paths. Empiricism leaves us here a long way from truth. A great degree of uncertainty attaches even to the favorite mean proportion, because it remains only approximative. If we take the doctrine of proportions as help, then we find in the proportion 0:1 an absolute diversity, but in the proportion 1:1 absolute equality. Hence, that proportion which shows itself to be the complete adjustment and accommodation of these two proportions, and of all others resulting from them, is manifestly the actual mean and the *normal proportion*.

To discover this mean proportion, Zeising set to work in the right way, partly by addition and partly by the doctrine of the golden section, and he found that, in every organic form, the smaller part (minor) bears such a proportion to the larger part (major) as this larger part does to the whole, that is, to the sum of the two parts. Now, if we add 0:1 to 1:1, we have the proportion 1:2. But this adjustment is not satisfactory, for the difference between 1:1 and 1:2 is still too great. But if we add still further, this difference becomes constantly smaller, and thus we finally arrive at the proportion: 0:1, 1:1, 1:2, 2:3, 3:5, 5:8, 8:13, 13:21, 21:34, 34:55, 55:89, 89:144, 144:233, 233:377, 377:610, 610:987, and so on, the final value of which is derived from $\frac{1}{2}, \frac{1}{3}, \frac{2}{5}, \frac{3}{8},$ etc., and may be expressed by

$$\frac{\sqrt{5}-1}{2} = \frac{2,236-1}{2} = 0,618.$$

The following maxim leads almost to the same numerical value. If we denote the value of the whole by T, the major by M, and the minor by m, then is $M = \sqrt{\left(T^2 + \frac{T^2}{4}\right)} - \frac{T}{2}$; or, if we take as the

whole (the unit) the number one in the form of 1000 thousandths, then we find the major to be 618.0339 thousandths, the minor to be 381.9660 thousandths, because M also is equal to $T \left(\frac{\sqrt{5}-1}{2} \right) = T \left(\frac{2,236-1}{2} \right) = T (0.618\dots)$.

If, now, that major 618.03.... be taken as the unit and be divided according to the same proportion, then we shall have, according to the nature of the proportion, in the previous minor 381.966 the major, and, in the difference of the minor and the major = 236.06, the minor of the same. In this manner the proportional progression of numbers presents itself 1000,0. : 618,03.... : 381,96.... : 236,06.... : 145,89.... : 90,16.... : 55,72.... : 34,44.... : 21,28.... : 13,15.... : 8,13.... : 5,02.... : 3,10.... : 1,91.... : 1,18.... : 0,72.... : 0,45, etc., in which, between every two adjacent terms, one and the same proportion is maintained, with very minute oscillations, viz., 1000:618 or 1:0,618, so that always three terms, standing together, form a constant geometric proportion, in which the first term is the whole, *i. e.*, the sum of the two following, the second is the major, and the third the minor. At the same time, every term of the series stands in the same relation to every second successive term, as obtains between the squares of the nearest adjacent terms, *i. e.*, the minor bears the same proportion to the sum of the minor and major as the square of the minor does to the square of the major, or *vice versa*, as $1000^2 : 618^2 = 1000 : 381$. In the third successive term, however, the minor is related to the sum of the major, and of the whole, as the cube of the minor is to the cube of the major, *e. g.*, $1000^3 : 618^3 = 1000 : 236$. The cipher of the power is thus constantly the same as the cipher which indicates the distance of the terms. These proportions express most completely the nature of all proportions, which nature rests upon a *harmony of relations in which the parts of the whole stand, on one hand to each other, and on the other to the whole*. Herein is given the relation of the *reciprocal complement* and the general mean proportion and the normal proportion, so, indeed, that in all the series proceeding from these, whether upwards or downwards, an oscillating approximation exists, *i. e.*, when, in any term, the deviation exists in the formation favoring the minor, then, in the next succeeding term, it is found in the formation favoring the major. These proportions are hence, in spite of their precision, not rigid, immovable, but living, free and infinitely variable, within the normal limits of all formations in nature.

Upon inquiring into the proportions of weight, we find, for instance, according to the law of nature, the proportion of the cube, since *weight* is conditioned by the expansion in all *three* directions of space. In

order, then, to be able to compare the actual proportion with the normal proportion, we must either extract the cube root from the given weight, or, once for all, raise the proportionate number of the proportion ($1:1,618$) to the cube, which is the more simple. For, since, as above shown, $1^3=1,618^3=1:4,236\dots$, so of the weights under comparison, we need but divide the larger by the smaller, and compare the quotient with the number $4,236$, in order that we may determine the nearer or more remote relation to the normal proportion. This may also be found in the higher powers, since they are always but terms of a succession corresponding to this proportion, since, for example $5,0\dots^5:8,1\dots^5=5,0:55,7$; where also, $55,7$ may be the sum of $21,2\dots$ and $34,5\dots$.

Example: The number of the front teeth is, to that of the molars, as $3:5$; of the former, the canine teeth are to the incisors as $1:2$, and of the latter, the false molars are to the true as $2:3$; and the dental system thus has the proportion $1:2:3:5:8$.

According to the measurements which Zeising made of one hundred men, the mean length of the spinal column is 71.05 centimetres; from its upper end in the pit of the neck, over the vertex, to the root of the nose, 37.91 ; from there to the upper margin of the alveolar process, 6.33 . The two last dimensions amount to 44.25 centimetres. The length of the spinal column is thus related to the bones of the arch of the skull as the major to the minor ($618:382=71.05:44.04$).

The chief ingredient of the cerebral fat is the combination of soda with a peculiar acid, the cerebrie acid; this contains, in one hundred parts, as is well known,

Carbon,	66.7	} = 80.5
Hydrogen,	.	.	.	.	.	10.6
Nitrogen,	.	.	.	.	.	2.3
Phosphorus,	.	.	.	.	.	0.9
Oxygen,	19.5	} = 19.5
						100.0	
						100.0	

Here then, the proportion of the oxygen to the acid of the remaining constituents, stands as $19.5:80.5$, and varies from the normal proportion of $19.1:80.9$ only by the inconsiderable fraction of $\frac{4}{1000}$ of the whole, but bears a still closer proportion to it than the proportion $1:1$, *i. e.*, nearer than the modification favoring the minor $5^2:8^2=19.6:80.4$.

The carbon here bears relation to the sum of the hydrogen, nitrogen and phosphorus as $66.7:13.8$, that is in inverse order, $=1:4.8$; here then, the major departs from the major of the normal proportion only about from $\frac{5}{40}$ to $\frac{6}{40}$, and from the major of the modification of

the normal proportion favoring the major, *i. e.*, out of 0:1 ($3^3:5^3 = 1:4.62\dots$) only about from $\frac{1}{40}$ to $\frac{2}{40}$ of the whole. Hence, if in the above case, the proportion of the oxygen to the other substances was favorable to the minor, so here it is, on the contrary, one favoring the major. Consequently, between the two departures, we find that a mutual compensation takes place. The proportion of the nitrogen to the hydrogen is $2.3:10.6 = 1:4.6$, and thus corresponds exactly to the modification favoring the major $3^3:5^3$: on the contrary, the proportion of the phosphorus to the nitrogen is $0.9:2.3 = 1:2.55$, and corresponds again to a strong modification favoring the minor, *i. e.*, about the proportion of $3^3:4^3 = 1:2.37$.

All the results of *nutrition* proceed according to these laws of proportion.

§. 25.

But, as regards the functions of the organism, there are general laws of its change, since the same phenomena return periodically at determinate times. Throughout all nature, periodicity is a prevailing phenomenon.

The bodily heat increases after waking, and gains its maximum at about nine and ten A. M.; from this time forth it sinks, increasing again, however, during the digestion of the dinner; from this time it begins to sink again, and this sinking is not sensibly arrested by supper. Between nine and eleven P. M. it is still one-tenth per cent. higher than on awaking.

The change in the intensity of the functions alternates, also, every other day. In thirty-two experiments, by Bischoff and Voit, it is true, on a dog only, but four exceptions were observed as regards this alternation. Even as regards the urea, this type returns again, and seems to hold good, also, as regards respiration.

The most remarkable periodicity, in the organic functions, is that which occurs within twenty-four hours, and is contained in the following table of Horn:

<i>Time of day of Observa- tion.</i>	<i>Hours of Observation.</i>	<i>Number of Pulsations in the minute</i>	<i>Quantity of Carbonic acid exhaled from the Lungs in a minute, in C.C.</i>	<i>Numbers of Hours of Diminished and Increased Pulsations and Excre- tions of Carbon.</i>
Noon.	11.30	78	140	1
Afternoon.	12.30	76	135	2
	1.30	74	130	3
	2.30	72	125	4
	3.30	70	120	5
	4.30	68	115	6
	5.30	70	120	7
	6.30	72	125	1
Eve'g.	7.30	74	130	2
	8.30	76	135	3
	9.30	74	130	1
	10.30	72	125	2
Midnight.	11.30	70	120	3
	12.30	68	115	4
Morning.	1.30	66	110	5
	2.30	64	105	1
	3.30	66	110	2
	4.30	68	115	3
	5.30	70	120	4
	6.30	72	125	5
	7.30	74	130	6
Fore'n.	8.30	76	135	7
	9.30	78	140	8
	10.30	80	145	9

From these experiments, it appears that the quantity of the Carbonic acid excreted, and the number of pulsations in twenty-four hours, is increased from 6.30 to 9.30 P. M., and from 8.30 to 11.30 A. M.

§. 26.

As regards the interchange of matter itself, the *cells* are the laboratories for the *substances* introduced into the organism, and the *connective tissue* forms, in general, the frame for the organs, nerves, vessels, etc., in which there are cavities and small canals. The latter furnish the means of communication—to and fro—between the organs and the blood of the capillaries. The sanguineous as well as the lymphatic capillaries, are always found without a wall of their own capable of isolation. They are canals, sunk in the tissue of the organs, which canals stand in direct connection with the cells of the organs.

Now, having previously paid attention to the oxidizing and reducing processes of the interchange of matter, we next come to speak of the *mechanical* factors which at one time foster these processes, and at another restrain and modify them.

Capillary attraction supplies, in the capillaries, the pressive force of the regulators of circulation, for the purpose of moistening and saturating the adjacent organic parts, which are all porous. Now, although there is immediate contact in the capillaries, between the blood and lymph on the one hand, and the parts of the organ on the other, yet the blood and lymph meet many a resistance, preventing the immediate combination with the fluids of the cells. These resistances are presented in the porous *membranes* of the cells. Although, now, various fluids are separated by porous partition walls, yet they do not maintain their chemical differences very long, but seek to harmonize these differences, and if a true chemical combination is impracticable, a change of location of the minutest portions of the fluids will take place, at any rate.

The blood-corpuscles, for example, are also cells, which float in an abundant inter-cellular substance, in the fluid of the blood. This belongs, in the minutest portion, to the cells, and is also introduced from without. This holds good with almost all inter-cellular fluids. The inter-cellular substance, however, surrounds the cells, now in a fluid, and now in a solid form.

The contents and surroundings of the cells may have a two-fold origin; they are either the products of cells or they flow around and are absorbed by them. The direct afflux of the blood, however, is not everywhere necessary, for the moistening fluid of the organs suffices, as in case of the cartilages and the capsule of the lens, which, in a healthy condition, appear to be without any vessels; even the nervous influence is not always necessary, as, for example, in the nerveless cornea.

Thus, amid all these conditions, a partition wall is always found between these motions, through which the taking in and giving out, *i. e.*, diosmosis, takes place, and in accordance with the following laws of nature. This diosmosis reduces the law of gravity to the individual cell. Hence thus, the diosmotic equivalent, *i. e.*, the particular quantity of water, which is different for the diosmosis of different fluids, it is true, depends upon the chemical properties which those fluids, which are to come into contact with each other, have among themselves, but principally upon the differences and affinities which exist between the fluids and the *membranes* of the cells and tissues, and, at the same time, upon the degree of their concentration, temperature and velocity.

Diosmosis, hence, proceeds the more rapidly, the more different, as to their chemical composition, are the fluids in motion on each side of the *membrane*; but it is the *membrane*, the specific anatomical con-

struction, material constitution and molecular motion of which produce various further modifications. Solutions of sugar, for instance, which are thrown into the veins, do not pass into the milk, but into the bile. If one takes a solution of Hydriodate of Potash, it appears in the pancreatic juice and in the tears, long before it does in the bile and the urine; Strychnine operates upon the ganglion cells of the spinal marrow, but not upon the peripheric nerves, while Opium affects both. This proves that the various cells, as long as they are alive, have, according to their construction, specific attraction for various substances.

Gerlach declares, "Frogs' larvæ lived four weeks in a mixture of five or six drops of a concentrated solution of carminate of Ammonia in an ounce of water. The epithelial cells of the intestine and of the outer skin had received *no* coloring matter. Only single nuclei of the epithelial cells of the skin showed a reddish color. This occurred completely, however, in frogs' larvæ, even twenty-four hours after death. If we inject carminate of Ammonia into the stomach of a living frog, the acid of the gastric juice will precipitate the carminic acid, while the cells of the intestinal epithelium, on the contrary, absorb not a trace of coloring matter. Two specimens of *ascaris acuminata*, died in the colored solution, and lay there a day after they were dead. The *dead* tissue of the mother ascaris was saturated with the coloring matter; this was lacking, however, in the eggs which were being developed in the still *living* young. The nuclei of the cells of the ciliated epithelium did not become colored, so long as the motion lasted, and even for some hours later. The color appeared, however, in ten minutes after the death of these cells. Something similar was repeated in the Spermatozoids and in muscle-cells. *The living membranous obstacles limit the dead chemistry*, and all physiologists and physicians (Berger, die cellul. Path.) acknowledge the fact as beyond dispute, that some substances can be eliminated from the blood only by certain definite routes, which the various excreting organs offer, while others take or prefer this or that way; *they admit, too, that certain remedies act upon these constituents rather than upon those, and that their influence manifests itself in certain parts of the body in a determinate way, without any variation.*"

§. 27.

From the natural laws of Physiology, thus far presented, *no* vital force can be inferred. The idea of a vital force is only a predicative abstraction, and neither subject nor object. It is a conception, but

no object of the senses; a subjective perception, as that of the vault of the heavens. Should that high authority of the present day say, for instance, "the balance is the vital force of chemistry," the *form* of the opinion is at least logical. But if I say, "the vital force is *that* which necessitates, forms and sustains life," one must first ask what this 'that' may be, and for this there is no other answer than the vital force; hence this 'that' indicates nothing but a vacuum (in ideas). The vital force is a teleological phantom, in spite of Liebig and Virchow.

Nothing is more convenient, and nothing more dangerous for science than the use of any abstract ideas whatever, as the basis of a definition. We rock ourselves on the surface and let our hands rest idle, thinking that the depth is fathomless; why, therefore, should any one ask for the bottom? Of course, the fundamental law of our reason is that of necessary *unity*, but in a two-fold manner. First, as the *harmony of our material knowledge with the laws of nature*, and then under the form of ideas, as the direct *perceptions of reason*. Thus there is a separation of two legislations, mutually opposed, the one for the *idea*, the other for *nature*. The source of the superstition about the vital force, as well as a host of equally valuable errors of learned and unlearned, arises from an involuntary confounding of the law of the spiritual world with that of the material world.

In the material world, which is the world of Chemistry as well as that of Physiology, Pathology and Therapeutics, the subject appears very different. In it "necessity" is the determination of a whole by law, and, in connection with necessity in the mutual influence of its masses and forces, the contingency of the mathematical form of the organism comes in, or that of the combination, according to the *laws of its specification*.* Examination finds, for instance, nothing *permanent* in the organism, but the specific form of the mutual action of its substances, and forces, which undergo an incessant growth and decay. Its specific form is thus nothing, but the result of the mutual action of its substance. The whole interchange of substance is nothing but a change of form of unchangeable, indestructible elements.

According to this law of specification there thus always results, from an entirely similar material combination of an organic body, the same form and function; according to this law, the first product from division in the seed of the plant is asparagin; in the animal egg,

* Specification. Our author uses this word in a manner peculiar to itself; it is untranslatable, but its meaning will be obvious from the context.—
TRANS.

urea; according to it, the liver-cells, for example, excrete carbonaceous matter; the kidney-cells nitrogen; the lung-cells hydrogen, etc., as long as they live and are sound; according to it, from the very same blood, the bony substance may take a specific quantity and quality of earthy constituents, the muscle-cells, their peculiar coloring matter, the milk-cells, their fat, etc., just as, from the same earth, the oak may take twenty-nine per cent., while the vetch takes but three per cent. of silicic acid; according to it, though at the expense, indeed, of the nitrogenous elements, occurs the deposit, increasing with years, of earthy constituents in the human, as well as in the vegetable organism, and with which, also, a change of function keeps pace, and the organism itself, as we are wont to say, gradually meets its inevitable death.

But the permanence of the organism, even in this succession and change of its states, is the unchangeable *identity of its kind* in its whole and its parts, so that the oak remains an oak, no matter whether it grows, becomes green, flourishes or dries up, and never becomes an ash. Virchow gave a striking example of his ignorance of these laws, by believing, as he did, that he had found a cellulose in the human body, consequently a vegetable substance, because it presented the re-action to the iodine-test peculiar to vegetables. Nevertheless, this discovery must be false, *a priori*, according to the law of specification, and chemistry also has shown it to be false, since it has found that this cellulose is not free from nitrogen.

Vegetable forms can no more be found in animal bodies, than inorganic forms can be found in animal or vegetable organisms. Thus, also, the so-called blood crystals of Virchow are not crystals at all, for their forms are capable of imbibition, and may undergo modifications which are foreign to crystalline formations.

It is only in the consideration of the laws of nature that we find ourselves safe from such errors.

I have shown, in previous paragraphs, that our organism, to insure its perpetuity, has to comply constantly with two material conditions: it must, for instance, in due proportion with the oxidizing influences of its oxygen, have reducing ferments, which are introduced into it uninterruptedly, by the food, and we have to hold fast to the experience, that the products formed by putrefaction, or fermentation, are not usually different from those into which organic bodies are separated by the action of acids and alkalies, although they differ according to the different substances with which they are brought in contact; but now it is further known that *very small quantities* of the most diverse substances, suffice, under favorable conditions, to produce such

an effect upon large quantities of other substances, as to reduce the latter to more simple combinations.

§. 28.

Hence the inquiry is also to be made, in what quantities are the various nutritious substances distributed in the organism? On this point, a couple of examples:

According to C. Schmidt, 1000 grammes of blood corpuscles contain, of Chloride of potash, 1.62, Soda, 0.52, Phosphate of soda, 0.16, Potash, 0.17, Phosphate of potash, 1.01, Sulphate of potash, 0.06, Phosphate of magnesia, 0.08, Salts, 3.64. Haematine, 7.18, Globulin, 132.6, Water, 311.13; the liquor sanguinis contains, Water, 495.4, Phosphate of magnesia, 0.29, Sulphate of potash, 0.13, Phosphate of soda, 0.20, Soda, 0.70, Chloride of potash, 0.22, Chloride of soda, 3.06, Salts, 4.14, Fibrine, 3.92, Albumen and extractive matter, 39.34.

Of these bodies again, the Haematine consists of Carbonic acid, 65.35, Hydrogen, 5.44, Oxygen, 10.40, Iron, 11.88. Of 100 parts of Globulin, there are of Carbonic acid, 54.5, Hydrogen, 6.9, Nitrogen, 16.5, Oxygen, 20.9, and Sulphur, 1.2. Of the Fibrine, in 100 parts we have, Carbonic acid, 52.6, Hydrogen, 7.0, Nitrogen, 17.4, Oxygen, 21.8, and Sulphur, 1.2. In 100 parts of Albumen, there are of Carbonic acid, 53.5, Hydrogen, 7.0, Nitrogen, 15.5, Oxygen, 22.4, and Sulphur, 1.6.

In order to learn the distribution of these substances of the blood, we must first compute how much of them every blood cell possesses.

1000 grammes of blood cells (1 gramme = 1 cubic centimetre) thus contain, according to Schmidt, of Chloride of potash, 1.62, and of Phosphate of magnesia, 0.06 parts of a gramme, etc.

A blood cell, as is well known, measures, in its breadth, 0.0072 of a millimetre, and its height is a fourth of its breadth. The cubic contents of the blood cell are, therefore, considering its disk, a cylinder $= r^2 \pi \cdot \frac{r}{4} = 0,0072 \times 0,0072 \times 3.14 \cdot \frac{0.0072}{4} = 0,00000029299968$, c, m, m. 1000 grammes of blood cells (1 gramme = 1 cubic centimetre) contain of Chloride of potash, 1.62, and Phosphate of magnesia, 0.06 parts of a gramme, etc. How much of each of these substances now does a blood cell contain?

1000 grammes = 1000 cubic centimetres.

1000 cubic centimetres contain 1.62 parts of a gramme of Chloride of potash.

1 cubic centimetre contains $\frac{1.62}{1000}$ parts of a gramme of Chloride of potash.

1 cubic centimetre = 1000 cubic millimetres.

Hence, one cubic millimetre contains $\frac{1 \cdot 62}{1000} \cdot \frac{1}{1000}$ parts of Chloride of potash, and a blood cell which equals 0.00000029299968 cubic millimetres, contains $\frac{1 \cdot 62}{1000} \cdot \frac{1}{1000}$, $0.00000029299968 = 0.0000000000004746594816$ parts of a gramme of Chloride of potash.

A blood cell, furthermore, contains 0.00000029299968, $\frac{0 \cdot 06}{1000} \cdot \frac{1}{1000}$ parts of Phosphate of magnesia, which equals 0.000,000,000,0000175-999808 parts of a gramme of Phosphate of magnesia.

Thus, a blood cell containing 0.00000029299968 cubic millimetres, contains 0.000,000,000,000.4746594816 parts of Chloride of potash, and 0.000000000000175799808 parts of a gramme of Phosphate of magnesia, and this unit of course becomes infinitely smaller when diffused over the whole blood cell.

To this we may be allowed to add a few words of the celebrated physiologist, Dr. H. Valentin: "The extreme minuteness, and the immense quantity of the ultimate elements, everywhere engage our attention. The smallest image observable by the eye originates in millions of atmospheric vibrations. A grain of salt, hardly large enough to taste, contains billions of groups of atoms, which no mortal eye can ever grasp. *Nature works everywhere with an infinite multitude of infinitely small magnitudes*, which, homogeneously or heterogeneously aggregated, become appreciable to our comparatively dull organs of sense, in their ultimate masses only."

It appears from this, that the elementary part of life is not the cell, but the manifold substances out of which each cell is composed; and all the vital, molecular and other forces, which Virchow has invoked for the explanation of physiological life, resolve themselves into quality, quantity, and relation of the various substances of which our organism consists. and their forces.

But Virchow avoids chemical illustrations and the use of numerical proofs. As little of one as of the other is to be found in his writings, and of chemical illustrations he thus speaks, in his latest work, "Die krankhaften Geschwülste:"

"Every possible tumor has been, as we may well say, chemically maltreated. *We do not, as yet, understand how to put the question aright.* At all events, we have never found anything which might be called the *specific material*, the peculiar substance of a tumor; it was finally concluded that the worse a tumor was, the more albuminous matter it contained, while very peculiar substances were found rather in homœoplastic formations, from which gelatin, peculiar kinds of fat, etc., could be obtained. Under chemical examinations, the *benign* tumors yielded more results than the *malignant*, as is readily under-

stood, because there we meet with forms of tissues more familiar, and better known according to their composition," etc.

But if Virchow himself *does not know how to put questions* to the organism aright, he cannot avoid uttering such distorted views as these; he does not know yet that the organism itself is the most sensitive re-agent, that we can put productive questions to it only when we introduce into it various substances and observe the results which, in that case, issue from the laboratory of the organism.

§. 29.

From all this, it is evident that there is no ground for accepting a peculiar formative activity in the cell, according to Virchow, and this is clear from the history of embryotic developments.

Experiments with the semen of animals have shown that its substances contain albumen in an undeveloped state only, and that this albumen decreases in proportion as the seminal animalcules are more developed. In the developed condition, they consist of the same substance as the epithelium, and especially the corneous formations, and possess, by virtue of their compositions, such a power of resistance that they undergo no change when treated with concentrated Sulphuric, Nitric, Hydro-chloric acids, and Caustic alkalies, nor even when boiled in concentrated Acetic acid. While, at the same time, the seminal animalcules represent the nuclei of the seminal cells, set free, we find in the egg itself just the opposite of all these properties.

But all the properties of the egg-cell do not proceed from an *independence*, which enables it, to a certain extent, to supply its own wants *within itself*, as Virchow thinks; but all these properties come to it from without, as the seminal animalcule from the man, and the ovum from the woman.

The further significance of the seminal animalcules is shown by this, that the first event after the entrance of the seminal animalcule into the egg is the division of the yolk, consequently a union of originally separate constituents of the egg into single cells, into determinate round *forms*, which keep themselves separated from others again. Corresponding to this, the experience of life shows us that the form of the connective tissue comes from the father, the form of the cell-life from the mother.

But even at the moment of sexual union, functions are given which take place under a proportionately higher paternal than maternal temperature.

Hence both the egg-cell and the seminal animalcula take from the parental organism, molecular motions as a *viaticum* for their journey. These motions in the egg-cell, though imparted to it from the copulative function of the mother, nevertheless soon reach a complete equilibrium; the egg goes on to chemical decomposition and thence to destruction. If, however, the seminal animalcula of the father reach this egg-cell before this catastrophe, it is at once rescued, and we see that it increases and grows in size and weight; we consequently observe the *nutritive* importance of the seminal animalcula which manifests itself thus, that after their reception, as above stated, divisions and separations take place within the body of the egg. But ruin would threaten these organic activities also, were it not that, while this primitive growth is taking place, an exudation, an albuminous deposit is thrown out upon the mucous membrane of the tubes, which serves to the *further nourishing* of the egg; for, imbedded in this, the egg constantly increases both in magnitude and weight, while, at the same time, within, the yolk divides itself into two, four, six or more little yolks, and continues in this progression, till, with the entire disappearance of the last trace of the seminal animalcula, it becomes an apparently homogeneous mass, while a single, distinct, circumscribed globule remains, the *area pellucida*, which has already clearly separated itself into an animal and vegetative membrane. In the meantime fourteen days have passed, and the egg has now reached the cavity of the uterus, where it is received by a new exudation thrown out during this period — the chorion — and thus constantly finds *new means of nutriment*. Amid these changes of form and place it finally sinks deeper into the cavity of the womb, where, surrounded by the cells of the chorion, it comes now, through these, into contact with the blood of the mother, which it will attract and appropriate to itself as still further nourishment. Thus, under influence of the maternal blood only, the organs and systems continue to develop themselves till ready for birth, after which the *vagus* and *sympatheticus* assume sway in the child, which craves, henceforth, air and *nourishment from the external world*.

Thus, in all these earliest stages of human existence, we clearly see a succession of *functional and nutritive processes*, under which the specific *form* of the human organism is constructed. Of the nutritive, functional or formative *irritations* of the cells, we have thus far observed nothing; on the contrary, just as the possibility of nutrition and function must be given to it (the cell) from without, so also are the *form* and *figure* of the cells the result of motions of material sub-

stances, which have found themselves united according to the laws of their *surroundings*.

The cell-life alone would never bring the sex to completion; this is inconceivable without the *connective* tissue, and, in fact, is never otherwise accomplished; the motto *omnis cellula e cellula*, every cell from a cell, is the greatest error which a learned man can commit; it is false according to the laws of nature, as is that earlier dictum, *omne vivum ex ovo*, every living thing from an egg.

Even *a priori*, and intuitively, we may see that nothing can originate homogeneous to itself, and even the local metamorphosis of some cells, their endogenous propagation, is not possible without connective tissue, without inter-cellular substance, by which they come into contact with structures which bring them nourishment and take away that which has become effete. Where the conditions of life are wanting, death ensues; but the cell, even the egg-cell, as we have seen, does not nourish itself *from itself*. The endogenous propagation, or that by division, etc., takes place only when, after the complete growth of the egg-cell, its similar has formed within itself in such a surplus, that, *according to the laws of nature* it *must* be expelled, just as occurs after the formation of the spermatozoa in the mature man, or, that of the ovum in the mature woman. Both these cell-structures, as soon as they have become homogeneous with their male or female parent-cells, must go forth as daughter-cells, either in normal congress, or, by disintegration and absorption, or by spontaneous discharge.

The organism consumes an amount of nutriment which seems quite considerable when we reflect that its growth has a limit set to it, and then it happens to it as it happens to the endogenous cell-structure; it must find ways and means to rid itself of its overplus, which has become homogeneous with it. Even plants bloom only when they have come to full growth, and every twig of a tree which bears flower-bud, has, for the time, ceased to grow.

§. 30.

As the nutritive activity of the cell, which receives, from without, the material necessary for the formation and preservation of its form, so every function is thus called forth from *without*, although it be only *relatively* from without, *i. e.*, *within the limits* of the organism itself, according to the laws of reciprocal action. Thus, for example, the pancreas does not find, except during the time of digestion, those elements which might serve for the formation of its ferments, in order to digest albumen, which leaves the stomach undigested in no small

quantity. This ferment is not present in the pancreas when fasting, notwithstanding that the gland actively throws out its peculiar secretion. It is, however, very heavily laden with its ferment, if we cause the peptogene to be withdrawn from the stomach.

The substances which cause the pancreas to become heavily loaded, are such as are principally and almost exclusively taken up by the lymphatics; the others, which, during the presence of peptone, load the pancreas but little, are such as are chiefly absorbed by the *blood*, so that but very little of them remains to pass on into the lymphatics.

Dr. Schiff, who made these investigations, thought it highly probable, that the absorption by the lymphatics in the stomach alone produces that change which induces the materials appropriate to the production of the pancreatine, when these are found in the blood, to localize themselves in the pancreas.

Although material, sufficiently prepared, is given to load up the pancreas by the very presence of peptone in the blood, yet we find, nevertheless, in the spleen, the second condition for acting upon the state of this gland itself, and so modifying it, that now more and other constituents of the blood can find entrance into the gland and its secretions, than before.

This discovery was made by the experiments which Schiff set on foot in this direction; they have shown that where the spleen is wanting, the pancreas cannot digest albuminates, and that, then, on the contrary, the digestive faculty of the stomach increases in a great degree.

The loading of the pancreas with peptone is thus the condition of its digesting albuminates; this loading is a secretion, which, however, does not proceed direct from the pancreas, but it receives this faculty *from without*. If this is to many the most striking phenomenon of this kind within the organism, it is, nevertheless, true that every function is always excited *only from without*.

The influence of oxygen, coming from without, upon the organic functions, is, indeed, the most universal. "Even the fact that all organs of animal bodies need *arterial* blood, indicates this, that not merely the blood, but *all the organs of the body respire*, and though in several organs, for example, in the lungs and kidneys, which perform merely mechanical functions, oxygen may be necessary to nutrition only, it is yet necessary to the most of them for the preservation of their function; to the glands, for example, for the production of their secretions; to the spinal marrow, brain and the nerves as well as to the muscles, for the development of their *peculiar* powers." (Traube.) Here we find implicit mention made of the reduction process, but not a clear statement. The independence of

the cells, hence, is nothing more or less than their peculiar interchange of matter according to the laws of diosmosis.

The laws for the nutritive and functional motions of physiological life, are, in their general outlines, now sufficiently developed, as far as they relate to their connection with therapeutics, for professional men, and this is as far as my present purpose extends.

DISEASE.

§. 31.

Now, as we may venture to presume, it is understood how Virchow expresses himself upon fundamental pathological views, and it only remains to overthrow their error.

His opinion that the *common cause* of all the phenomena in sickness, as well as in health, is life itself, and that the very essential difference between them consists only in their conditions, is an erroneous view at the very outset; for there are only *reasons of perception* — perceptive reasons — *rationes cognoscendi* — and *reasons of existence* — essential reasons — *rationes essendi* — of which the former have to express the logical, the latter, the real connection of things. Only on giving the essential reasons can we speak of *conditions*; for the condition is the cause of a thing being so, and not otherwise, in the succession of space and time. So far would the assertion, that life is the common cause of sick as well as of healthy phenomena, be a proper expression; for, in the space of the healthy life, the diseased life develops itself in course of time. But in the logical relation, life cannot be accepted as the common cause of diseased and healthy phenomena; for the *law of causation* assures us, with *conformity to law*, which admits of no exception, that a body cannot contain *the only* conditions of its various forms of existence, for nothing consists of itself, but must have a cause, and the equally inevitable law of *vis inertiae* adds to this, that this cause can only come *from without*. Hence if life, according to its physiological laws, comprises the *one* presupposition and the one inner side of the conditions of the possibility of a diseased process or condition in itself, then must the exciting cause of this (process or condition) be another, *external* thereto, and this must present the other side of the conditions of this process, whether they are hereditary or acquired. Further, since the essence of a thing is its cause, because every thing which exists, contains only expressions of cause which have of necessity called it forth, so must there be also, as will be clear from what follows, a causal and hence an essential, or what here amounts to the

same thing, a very essential difference between those substances and forces, by virtue of which healthy, and those by virtue of which diseased, life exists.

§. 32.

On what now is the very remarkable appearance of such unwarranted but specious assertions founded, in the minds of all the learned ones of the physiological school? Indeed, one of its best writers says, in his "Clinic of diseases of the Liver," almost with the very same words: "In our times we are all agreed that the science of life is *indivisible*, that between its various forms of phenomena in healthy and diseased conditions, there are no *essentially marked* lines, but the same laws govern in one as in the other." For the sake of gaining some kind of a foundation for his ideas, this writer, like Virchow, resorts to an obsolete mode of considering the subject, continuing, as he does, "the general points of view have become more simple, since we have ceased to separate the disease from the sum of the phenomena of life, as something *foreign*, existing by itself, and independent."

In the previous century, even, and in the early part of this, Pinel, Bichat, Corvisart, and Broussais, were the authors and founders of these views which yet prevail in Germany. It is true that they were the physicians who first gave prominence to the importance of objective phenomena, but they sought to demonstrate, according to physiological laws, from its anatomical tissues and systems, why the organism became diseased; and the *schools* which they established are still called the physiological.

The idea of the foreign and independent in diseases (as if some especial spiritual beings were underlying them, as, with the Romans, nymphs were supposed to dwell in the streams, or fauns in the woods), just as it certainly existed in pathology *before* the appearance of these learned men, so in due course, was long since abandoned.

But on what grounds have the learned men of the physiological school in Germany, for the last twenty-five years, in almost all their works, come to accept these views of former times? Is it, perchance, that they wish thus to excuse their own lack of advance in therapeutics, which they themselves acknowledge? The author of that "Clinic of diseases of the liver" gives this very answer in these words: "Between the scientific contents of clinical medicine, and practice — *its peculiar mission* — is an abyss over which only a few insecure ways are found." That painful sense of the practical *impotence* of this school, or, as

they have begun quite lately to re-christen it in clinical medicine, its *poverty in therapeutics*, are the very reasons for which these learned men seek to excuse themselves by making comparisons with former times, and to delude their pupils into errors. And this delusion has, in the course of years, proceeded so far; these false doctrines, the most prominent of which we shall learn in the following pages, have become so deeply rooted, that they stand undisturbed in the very front of every new medical work, and every one thinks it praiseworthy to copy them *bona fide* from others.

The answer to this question points at the same time to the twin brothers of subjectivism—the incomprehensible things of skepticism, and the dogmatic fidelity to conviction, ever the greatest enemies of all science.

The history of philosophy has already taught us, that after subjective tendencies, after stoicism and epicurism, skepticism has always followed as the highest development of these tendencies of subjectivism.

Doubters are to-day, as ever, arrayed *against the certainty of knowledge*. Hence the attacks of skepticism have been especially directed against causality. But if this be overthrown, *the very thread of being and thinking* is broken.

The skeptic Hume, for instance, called the law of causality the unfounded habit of the mind, arising only from repetition. What have we gained by that?

As result of such a habit of thought, the determining of the *universal and necessary* must be abandoned, and every opinion of the physician at the sick-bed must be set down as error, *a priori*.

Skeptical opinions always remain unfruitful, since they do not advance us a hair's breadth. At no time has any creation belonged as yet to a doubter, as his own production; *hence the doubter leads the unfruitful life of a nun*. He who doubts *judges* first, and has nothing to tell him, whether truly or falsely; hence he will never *know* any thing; for, as soon as he knows any thing, he must change his programme. But to know any thing, facts are necessary above all things; facts which can not be doubted, and of which we know also that they happen according to necessary laws. Knowing and doubting then, form contradictory antitheses, from their very origin; and to doubt is a subjective condition of the human mind, just because it lacks the objective law.

The scientifically observed fact does not doubt. Hence he who doubts about therapeutics, has observed nothing of it; but, neither has he brought any proof of its non-existence. Now this indeed

characterizes the doubt of the analyzer. But the word "doubt" may create misapprehension in the unlearned. The analyzer doubts and denies, and that is the end of it. But the doubt of the synthetizer is no doubt merely, but rather a demand for proof of the subject. Hence, the synthetizers are never reckoned among doubters, because they seek after laws, and thus neither deny or affirm, till they have found the law of the course of events as yet to them unknown. They have become scarce at the present day.

Dogmatism would like to proceed from a principle, from the consideration of a problem, *e. g.*, of the life-force, and from this seek to obtain illustrations. It has constructed for itself knowledge from empty ideas, without inquiring after the right by which it has obtained it. If its principle, however, should contain a fundamental law of nature, or be opposed to none, it could not make the assertion, that the common cause of all phenomena, diseased as well as healthy, is life itself, for this assertion contradicts the natural law of causality, and hence is false.

The dogmatism of the physiological school, it is true, does not consist in *credo ut intelligam* — I believe that I may understand — but in the — I believe only just so much as the knowledge which I have accidentally obtained expresses. The argumentative force of this article of faith, which is also brought to bear against Homœopathy, needs no further comment.

§. 33.

Virchow says: "What we call disease is a mere abstraction, an idea, by which we separate certain complex phenomena of life from the sum of the rest, while no such separation exists in nature." For representation, for speech, he thinks such abstractions may be necessary, for the reason that only thus the reciprocal relation can be understood. With regard to practice, and for the comprehension of separate cases, they must be abandoned, since they bring with them the danger of neglecting the patient for the disease, and the reality for the idea. The patient only, he thinks, is the object of medical activity, and the physician should never forget that his aim must be an aim of humanity.

To form an abstraction, without any separation in nature corresponding thereto, would be, he thinks, an impossibility for a philosopher; it is, in his eyes, a self-contradiction. But is what we call disease really only an abstraction? We make use of the expression only in a three-fold manner:

First.—When we abstract a law from a given case, and recognize it as holding good for all other cases. In §. 25 it is stated, for example, that Horn made experiments upon himself, with regard to the excretion of Carbonic acid, and found that it increased and diminished again twice in twenty-four hours, and that at particular times of day. From this every one can form the abstraction for himself, that the same change in this function must take place with *all* other men. Hence, by virtue of abstraction, the mind may infer these phenomena, already perceived by the senses, as being peculiar also to those men in whom the phenomena have as yet not been immediately observed. At this *separated* possession of consciousness, that this occurrence must be *universal*, the mind arrives, as we see, only through the first form of abstraction. This meaning, however, cannot be applied to the above quoted assertion of Virchow.

Further.—We can abstract, and conceive as separated, marks or properties from an object, analogous to subtraction, *e. g.*, an aggravation from bad weather, or good, etc., hence, the presence of many conditions accompanying the diseases, as if they were not present, or deserved no regard, as unhappily too often occurs in physiological medicine, because it does not know how to connect with it a practical judgment.

Thirdly.—A view or idea may be abstracted from all its phenomena, *e. g.*, the idea of a disease-form, by a comparison of all its symptoms with those most prominent, as the idea of fever, according to Virchow, from the phlogosis, in order to gain a general idea by separating all other peculiarities.

Of all these forms of abstraction, Virchow must surely have had the second in view, for he defines a definite succession of pathological disturbances to be the *simple negation* of the physiological. To this, in his opinion, also belong morbid states, for he proceeds: "The merely negative disturbances are no phenomena, no processes, no real diseases, but either primary changes, which may become the *points of departure* of morbid phenomena, or final *results* of morbid processes. In opposition to these negative conditions we find the *positive, active, reactive* phenomena of the disease."

In affirmative opinions, the mind comprehends the real as positive; the negation, however, is formed arbitrarily. Proceeding critically, I hence may set down nothing else as negative than the direct *opposite*. But Virchow denies this over and over again, for according to him, *e. g.*, *the same phenomena must be at once physiological and pathological.*

What now is really the view held by Virchow is not easy to unravel from such a confusion of ideas.

§. 34.

But if a man, in his expressions, intends to proceed at all logically, what he needs for expressing himself in speech, he must also need in practice, for theory never can outstrip practice with impunity.

Language, which serves to express the theory of practice, and to communicate it to others, has, however, nothing more important to do than to be *clear*. But the *theory* itself must be such that it can be based, in conformity with the laws of nature, upon facts given by practice, in order to be ready for all future cases; for the connection of facts cannot be explained from a problem of the reasoning powers, but only from the laws from which this connection arises. Hence, to protect ourselves from dogmatism and skepticism, we must always follow the path of the Critique based upon the laws of nature.

But this *Critique* is not a doctrine or a particular system, and no theory, but the *demand* rightly to conclude and to judge. Hence this Critique alone is able to form correct opinions in therapeutics, by the aid of which the physician can, *a priori*, establish the connection of events prior or subsequent to phenomena at the sick-bed, *i. e.*, by which he can establish his anamnesis, diagnosis, or prognosis.

§. 35.

Let us take, now, a single example, and we shall find that the views of Virchow assume a very different shape.

Dr. Schram, in course of his many scientific investigations, made the discovery, highly important for therapeutics, that ileo-typhus occurred only in regions in which meat was eaten, while petechial typhus originated in consequence of using insufficient and decaying vegetable food. Hence the decomposing element of ileo-typhus is a nitrogenous one. All ferments, however, possess the property of very powerfully attracting free and combined oxygen. Upon this rests their capability to *change*, with a minimum, an unlimited mass of another organic body. Where the resistance to such an influence is relaxed, we observe, further, that such ferments possess also the *property to withdraw the oxygen from every adjacent molecule, i. e., to de-oxidize it*. The ferment of the ileo-typhus, after being introduced into the circulation by respiration, meets, as is well known, the least resistance in the intestinum ileum.

Here now, investigation shows, that the substance of the glands, besides the lymph-cells which remain unchanged, contains an innumerable quantity of larger round cells, with many nuclei as *new*

formations; further on we have necrosis, which appears as dissolving soft foci, as small abscesses or caverns in the layers of the cortical substance, (Rindenschichte) and leads to the formation of the well known ulcers of typhus. If not cured, the disease extends only in a specific way, since, in regular order, well known changes of nutrition and function occur also in various other, but well-defined, parts of the organism.

What now shall we conclude from this? In the first place, in the foregoing paragraph, we have seen that the variable (within the invariable of the organism) is the very specific form of its existence, proceeding from, and consisting in, these lawful conditions of its existence, and that this variability is to be as little identified with the pathological ideas of a *change* in this existence as wheat is to be identified with wheat-smut.

If, on the contrary, a *causality*, the typhus ferment, for example, has succeeded in changing the specific form of the organic reciprocal action and in producing the so-called new formations and ulcers, then we must necessarily observe a *changed specific form* of the reciprocal action of the organism into which it was *compelled to enter against its laws*, with the ferments of the outer world, which are foreign to it. Such a changed form we then call a disease-form, *e. g.*, a typhus form, as we recognize wheat, upon which an excess of nitrogen has been forced, contrary to its laws, no longer as wheat, but as *uredo foetida*—as a disease.

Thus, led by experience, we must at first presuppose the organism, not only as a whole, in the constant normal sum of its substances and forces, in its specific form of reciprocal action, but we must also learn the laws of causation, from which is derived its peculiar composition, and by which it preserves the fellowship of its parts. Physiology teaches us the respective position of organs, systems, etc., as well as their modes of motion, the forms of their functions, the quality of their substances, *i. e.*, the whole mathematical form of the shape of the body. But a *dynamic* form, which is to bind all the separate parts into one whole, cannot also be expressed by *one* law, by one power, since we find, represented in the organism, all the fundamental forces of matter, which exist upon the earth, of which it is the child.

In such a system, which is constant, but whose physiological states or conditions are subjected to ever new changes, from external influences, as in the human organism, a change in the harmony of its being, of its constant physiological life process, may lead us as surely to the *contingent existence* of some object, as yet unknown, as, in the

planetary system, the changes in the motions of Mars led to the discovery of Neptune.

The idea of *change* is added thus to that of the effect of a cause, and is not contained in the idea of the effect. The What of the effect is always the change. This is the succession of two opposite conditions of the same organism. Now, if there is a physiological state of the organism and of its existence, then the idea of a change in the conditions of this existence—the pathological state, consequently that of disease—is given in connection with the one previous to it, the physiological, no matter whether the changes produced are partial or general. Hence, a condition by itself is never a pathological idea. The existence of the organism according to its qualities and relations to a specified time, is always its status in which we have to separate the *constant* from the *changeable*.

The latter are *accidents*, and accidents are always real, whether they appear in form of altered conditions, or disturbances, interruptions, debilities, or diminished power of reaction, *i. e.*, of increased irritability. *Reality* and *negation* are, however, two ideas excluding each other. In accordance with these laws of logic, the vacillating and confused ideas of Virchow, above mentioned, are to be explained and understood.

§. 36.

The whole of the reciprocal action in the organism rests thus, not always, upon the laws of the efficiency of its own powers alone, but is often influenced, as in disease, by the laws of one or more bodies from the external world, foreign to it. The *How* of the change is always chemical, in company with the physical phenomena, since every cause of disease changes a definite quantity of constant equivalence of organic *substances* and *forces*. Thus, *e. g.*, the connection of a miasm with the organism *can no longer be understood from the physiological laws of life alone*, but only from the form of reciprocal action *specifically* changed thereby, *i. e.*, *changed as regards its kind*, hence, *newly* produced.

The cause of these complex phenomena, including the symptoms of the disease, lies, therefore, in a certain *newly*-given form, according to experience, *e. g.*, in typhus, which brings to view the combination of movements which belong neither to the organism nor to the cause of the disease alone, and just in this way the various specific forms of disease have arisen.

In opposition to these facts, however, Virchow affirms "the character of the disease is that of danger."

One might doubt the assertion that a scholar had made use of this expression, were it not literally and repeatedly expressed in several places and quoted from various authors.

The character and the nature of a thing lie in its causes and conditions, hence the character of the disease flows entirely from them. One may say that a fatal disease has a dangerous character, but there are many diseases of which this cannot be said absolutely. "Disease" expresses a quality of our organism which is only perceived by the senses, and which can be measured only by extensive quantities, since it is itself an intensive quantity. It may gradually increase, decrease and disappear. Thus it is the *degree* which subjects the disease to the power of calculation. Danger is only a single and not a constant eventuality of this calculation, which can go from zero upwards, and from zero downwards, and it is not this calculation, but reflection, which is able to perceive the danger at every stage, and the oftener, indeed, the more the physician lacks the knowledge to effect a cure.

§. 37.

Virchow offers to science an equally unfruitful and erroneous train of thought as concerns therapeutics, by his denial of specific substances in various diseases, and by the apparent substitute therefor offered in the hypothesis of the so-called physiological *anti-types* or types of diseases. This idea pursued him even into his most recent work: "Morbid tumors." Thus he says, "*The type which generally determines the development and formation of the body, is also determining as regards development and formation of tumors.*" There is no such thing as another, a *new, independent* type. What may be *logically* determined in this manner, announces itself empirically also by the immediate examination of tumors. Hence I deny that any heterology exists in that sense in which it has been maintained since the days of Bichat, as it existed in a certain manner, even before him, in the heads of the people, that the tumor was formed and existed in the body, according to an entirely *different* plan, an entirely *new* law. I rather find that every manner of tumor-formation, whatever it may be, essentially agrees with well-known typical formations of the body, and that the most essential difference between various tumors consists in this, that tissues of the body, which of themselves are normal, arise in the forms of tumors, now in the midst of places which contain these tissues in their normal state, and then again in

others which do not normally contain these tissues. The first I call Homology, and the second Heterology."

For he thinks "that we must always maintain that the swelling, let it be as parasitic as it may, is yet *always a constituent part of the body, which proceeds immediately from the body*," and that "*the laws of the body govern also the tumor*."

Yet he acknowledges the existence of dyscrasiæ, but with the following mental reservation: "Although from the same source homologous and heterologous products may arise, yet we certainly cannot be allowed to conclude, from the nature of the separate products, to the special quality of the dyscrasia; for, if I take the syphilitic exostosis as a *point of comparison*, I must construct a kind of osseous dyscrasia which should be the foundation of exostosis. If I take buboes as the subject of my consideration, which are chiefly formed out of lymphatic cells, then I must suppose a sort of lymphatic-cell dyscrasia," etc.

Further, "Bones produce bone, upon *slight irritation*; connective tissue, connective tissue; glands bring forth new gland-substance. Each one of these tissues has an activity which corresponds to its nature; the *irritation which it receives from the dyscrasia* operates in every part according to the manner in which the part is adapted to act. There is needed a certain amount, a certain energy of specific substance, to beget specific products. Only then we see in the bones, as in the skin, as in the glands, gummoses, hence *specific* products arise. The same holds good with the other so-called dyscrasiæ. I refer to Tuberculosis," etc.

At present, I will point only to the contradictions in which Virchow has involved himself. Here he denies specific elements; there he presents them to us. Now he maintains that the human type determines the development and formation of tumors; now he teaches the existence of greater or less irritations of specific substances, which appear in dyscrasiæ.

The human type, however, never alone determines the development and formation of morbid swellings; but every pathological tumor, and every disease, shows only that here the human type has undergone a *change*; that, consequently, the cause of this, according to the laws of nature, must have come from without.

Hence, these assertions of Virchow *are far from logical*, and the results of chemistry are in *no wise complete*, so long as they are unable to discover what *material* quality becomes the cause of the formation of tumors.

To a Physiology which dispenses with logic to so great a degree, such an homologous heterology, or heterologous homology, might

well serve as a ground of explanation. For Pathology and Therapeutics, it is quite indifferent whether a gland-like *swelling* arises in a gland, or whether it arises where the human type has presented no glands; for in both cases a *pathological*, and not a healthy state, is manifest.

In the assertion, bordering on dogmatism, that the laws of the body control the tumor also, there is a broad contradiction; for the physiological life is there before the tumor, and the very succession, the following of a pathological state upon the physiological, is the scheme of causality. On this very account it is not only admissible, but necessary, out of the nature of single products, which do not belong to the human type, to make a deduction as regards the necessary presence of a peculiar material quantity which operates upon quite another plane, after a law entirely new in the body. Nothing but an utterly corrupt process of reasoning could hence deduce the paradox of an osseous dyscrasia, or seek to compare anything with it.

Virchow's whole doctrine of *aberration* is only a variation of his previous proposition, "that the sole basis of healthy and diseased life, is *life itself*;" and the quintessence of it is contained in these words: "The product of *diseased* life can agree essentially with that of the *normal*, only being greater or less, or, it may produce an entirely different result, which, however, would be normal only for another part." This would be as much as to say, in practice, that an exudation, for instance, which is formed during an inflammation of the lungs, contains the constituents of *normal* blood, only they are no longer contained in the blood alone, but a part of them is now deposited in the pulmonary tissues; hence, inflammation of the lungs is *no morbid* process, and the exudation in the lungs is *no morbid* condition, but they are merely healthy aberrations with the character of danger.

Did Virchow ever consider that, according to his doctrine, to establish a diagnosis and indication, or even a prognosis, is a useless and impracticable undertaking? Surely nothing else remains, then, but to cut off diseases, or else to destroy them, some how or other, by forces *which would have to be directed at the same time against the organism itself*; and it is just in this very thing that the wretched Therapeia of the physiological school consists.

We shall allow practice to settle this question also at another time, and merely remark now that Virchow has an easy part to teach such errors, for he cannot point to a successful practice. Under such circumstances, one may also advance the absurdity, "the same process must be physiological and pathological," or, plainly speaking, must be changed and unchanged at the same time; or, as in another place, where he

thinks he expresses himself more strongly, perhaps, "Pathology is physiology, with hinderances." To make up in poetic license what we lack in ideas and understanding, that be far from us! otherwise, Therapeutics would be a steeple chase.

§. 38.

All these gross errors of Virchow arise from the disregard of the difference between that which is constant and unchangeable in the life of the organism and that which is changeable. The *constant* and unchangeable are the laws of its specific forms, which forms we have, in general, learned in the cells and connective tissues, etc.; these forms also spring from parents; the *changeable* are the chemical and physical properties of these constituents, which its connection with the external world adds to it from beginning to end. Hence, it lies also in the nature of the thing that the pathological form-elements *must be like* the physiological, because the organism cannot form anything in its economy *against* its unchangeable laws, and a minus or plus of chemical and physical influences can only compel it to produce, in connection with its laws, such pathological new formations.

Virchow's whole view of physiological types is shattered upon the law of specification. According to this universally recognized law of nature, every change of form or function, in whatever parts of the organism it may occur, must always be accompanied *puri pissa*, with a changed combination of matter. Even when we observe phenomena merely physical, undergoing a change in the organism, as, *e. g.*, *elevations of temperature*, we know, first of all, that, at the same time herewith, chemico-vital changes have also begun and are not yet completed. Hence we can designate the physiological cells as arising from legitimate succession, but the *pathological, never*.

Thus there are two things which constitute disease—first, "the *qualities of the organism*," *i. e.*, the conditions for the disease; second, the external causes of the disease, which do not immediately emanate from it (the organism).

§. 39.

All pathological new formations are not to be reckoned as typical forms, nor as forms specifically belonging to man. The scirrhus [Krebsknoten] which, according to Virchow, "is quite similar to a lobular pneumonia in the stage of metamorphosis of the fibrinous exudation into pus (!) the fibroma, the enchondroma, of which Vir-

chow has learned to recognize many varieties, and from the very nature of the subject will learn still many more, *without ever coming to an end*, but also without enriching the Therapeia, all these contain, of course, cells and connective tissue, as they occur in physiological parts of the organism, just as grain, flour, and bread, consist of the same starch-cells and fibrine; yet we comprehend under grain, flour, and bread, very different forms of the combination of starch, owing to external causes; and no one would be so foolish as to believe, and to assert that he had said any thing worth considering, when he said that flour and bread agreed in essence with starch-cells and gluten. But to physiology this is possible; it rejects, owing to its morphology, pathological ideas, and esteems it not well founded to consider cancer-cells as something heterologous. Skepticism alone can err so far as this, and then efforts are made to cut off, with dogmatic assertions, any deeper investigation into the history of evolution of a pathological *condition*, although it is much more obvious that all forms of disease must obey a fixed law of constancy; that they should not surprise the physician as lightning out of a clear sky, for they are connected so closely together, as we shall see further on, that entire groups of chronic and acute diseases, externally the most various, form a unit in their *succession*, although one form produced by the same morbid cause occurs in early childhood, another in youth, and still another in advanced years. This surprises physicians of the physiological school, who seek the cause at a recent date and near at hand, and betake themselves to chemistry and the microscope, in order to discover the character of the presenting form, the cause of which could and should have been learned years and years before.

Yes, the confusion has already reached such a height that, while Virchow does not count disturbances of continuity and *necrosis* among diseases, the author of the "Clinic of Liver diseases," on the other hand, reckons even the natural confinement of woman, and the natural acceleration of the activity of the heart, from bodily motion, among the abnormalities.

§. 40.

Although chemistry has discovered no specific elements in morbid tumors, it has, nevertheless, discovered many things, and far more of what is important for therapeutics, than Virchow thinks himself permitted to believe.

While he evades chemical investigations, he seeks to shine rather with morphological varieties, a field which, for those who seek nothing

more, is quite inexhaustible, but which, for Therapy will always remain barren. Thus he now calls rachitic bony tumors, Enchondromata, and for the following reasons:

"In earlier times, as more importance was given to general dyscrasie, physicians, in investigations regarding the origin of bony tumors, frequently fell back upon other diseases of the bones, *e. g.*, upon rachitis. Subsequently, this was rejected, and it cannot be denied that, just in the case of enchondromatous persons, a fully formed rachitismus has but seldom been demonstrated. Nevertheless, I cannot forbear asserting expressly, in accordance with my observations, as to the several stages of the rachitic processes, that this, or a similar process of disturbance, really produces the predisposition." Do we know now just where we are? He proceeds: "The line of ossification does not advance as a straight, but a zig-zag line; it thrusts itself here and there with prongs or runners of marrow and bone-substance into the cartilage. As is the case with the synchondroses ossifying at a late period, so do we find in case of rachitis, in the most various parts. cartilages still behind bone already completed, and more than that, there are even isolated bits of cartilages found enclosed in the spongy substance of the bones. The supposition is certainly plausible that a fragment of cartilage thus enclosed, were it further developed, would become the *point of departure* of a tumor, somewhat as a tooth-sack enclosed in the jaw, becomes the point of departure, frequently years after, for the development of the teeth." (!)

That is surely meant to be an evidence of the *homology* of an enchondroma with Rachitis; but immediately thereafter Virchow teaches, "the striking phenomenon that the very beginning of the growth of bony tumors may so frequently be traced back into the early periods of life, and that just those very parts of bones which normally ossify at a late period, are immediately exposed, is most easy to understand, if we assume such a state of predisposition. But I expressly affirm *it is only a supposition*. I have never observed that such an enclosed portion became the *point of departure* of a further development, and it is certain, that, in many cases, the formation of tumors occurs in riper years, although nothing of the kind was previously observed. In fact, we shall see, further on, that, even when something of the kind had been demonstrated with regard to the starting point, at the same time the indubitable fact could not be rejected, that the enchondroma in its further growth was *entirely heterologous*."

Do we know anything now about this enchondroma? Is it homologous or heterologous, and, whichever it is, what is the cause of the

disease? Of what good is all this morphology, and all this talking back and forth about possibility or probability. The main thing, after all, is the *material difference* between physiological and pathological forms, in order that we may devise some Therapeia.

If one reads the chemical investigations of the bones, by Dr. A. Friedleben, and compares the proportions of organic to inorganic substances, as well as the proportions of their several constituents to each other, and to the aqueous particles of the bones, the conclusion must force itself irresistibly upon him, that even the lack or excess of fat, albumen, magnesia, iron, fluor, potash, alumina, lactic acid, of the phosphate and the carbonate of lime, etc., can only arise from disturbed function and nutrition, for *material* reasons; that the entire morphology of diseases of the bones teaches nothing but forms; that from these forms, at the best, the *degree* of the disease is to be gathered, but never its *material* quality; that from the intensity, form and spread of a disease, we can draw no conclusion as to an indication for a cure, yet very well from the material changes in function and nutrition which accompany them.

§. 41.

Function is the property of a body to produce a change in an outward direction, whether it consists in the production of a simple movement, or relates to the begetting of a new body. The process of nourishment, however, of *nutrition*, consists not alone in the introduction or removal of various materials, and not alone in this, that the magnitude and weight of bodies which are being nourished, increase or diminish, or remain in an oscillating equipoise; but all this takes place mainly by maintaining an incessant reciprocal action of the constituent parts of the body, according to law, by which every part of the whole is *at the same time* passive and active.

Hence *disease* is no reaction or passion, and its cause is no *action*. The verbals *Agens* and *Patiens* are both only the combined *conditions* of the phenomena of a *new* form of the whole of a reciprocal action, where cause and effect are ever conjoined. The *whole* cause of the phenomenon lies in the given form of reciprocal action, in consequence of the connection of an external cause with the inner conditions of the organism, and *not* in the forces of the parts.

It is not given, however, to every scholar to form just conclusions; even scholars frequently confound the conditions for the forming of a *conclusion*, with those required for mere analytical *comparisons*.

From these two sources, both the physiological and pathological errors of Liebig proceed.

To say that "the lungs are by themselves *passive* organs, that the chief process going on in them is not produced in the glands, and the secreting organs, by an internal, but an external cause; that, in themselves, they lack the powerful activity which in other organs opposes external disturbances and neutralizes them; that the mere inhalation of dust (of solid organic or inorganic particles) produces organic deposits in the tissue of the lungs, which are produced in quite a similar manner by internal causes," (Page 19, B. II. der chem: Br.) these views cannot be based upon any laws of nature.

These few short sentences show, indeed, a marked ignorance of physiological and pathological processes; for, in the first place, it is impossible that a part of the human organism should be *passive* or *active*, because it [the organism] exists, with all its parts, as a form of the whole of an immediate reciprocal action, in opposition to artificial mechanisms. The construction of the barometer renders possible only one motion and a counter-motion, and this is brought about only by an external cause, and *in succession*. In the organism, on the contrary, *all* the movements of all its parts, occur always at the same time and *independently* and directly through each separate part, according to the law of its specification, and what Liebig thinks he may designate as the *external* cause of the process of respiration, viz., the atmospheric air, belongs to the external conditions of our organism of *necessity*, and causes a *change* in its functions, as little as water does in the functions of the fish. Thus the lungs are no passive organs. The organism lives in the atmosphere, which, hence belongs, necessarily, to the law of the specification of this organism, and is *no cause*, but one of the conditions of its existence. Hence we cannot speak of the air as being an external cause of the lungs, in opposition to the internal cause for the secreting organs, so long as in this chief process, no changes have occurred *against* the law of the specification of the organism, which would then first move us to inquire after a cause, consequently, after a *pathological* cause.

Finally, the lungs possess just the same powerful activity, which, in other organs also, counteracts external disturbances, and seeks to neutralize them, so long as it is possible for all the organic parts to do this spontaneously. As regards dust, inhaled beyond a certain quantity, the lungs are just as powerless as other parts of the organism, into which dust might be introduced; for dust may operate everywhere as the *cause of changes* in nutrition and function. Even the organic deposits in the tissues never occur from *internal causes*, for in

the sense of Liebig, there is no such thing in the organism, since nothing can be its own cause.

Comparisons and *analogies*, as we find them in Virchow and Liebig, are spots in science; for, in all such analogies, it is clear that far from being able to prove anything, the adaptation of the analogy is the very thing to be made out. The results of all such comparisons and analogies, hence, have the full significance of a paralogism of a *petitio principii*.

§. 42.

If *nature* is that which takes place without human intervention, then art is that which the human mind, of its own will, strives to form. And since it lies in the purpose of Therapeutics to neutralize, in a manner conformable to natural law, a form of reciprocal action of the organism with the outer world, by which the natural state of its existence seems changed, so it is evident that art has no other means of effecting this than to induce such a reciprocal action with the organism, with the help of the outer world. But since I can only bring such a *Restitutio ad integrum, conformable to natural laws*, under the idea of "cure," "I can call only the art, that effects this, the healing art."

We know clearly, from perception, how one condition follows another with regard to time, but how one proceeds from another, we know only according to the law of causality or effect. In this logical sense, since the idea of *change* rests upon that of *constancy*, we must designate what *remains unchanged* during a disease, as its *physiological residue*, and the changed as its *pathological momentum*, and by *diseased state*, we understand the present form of a morbid reciprocal action, and, by morbid process, the process of that form.

According to the intensity and the extent, as well as according to the relation between the cause of the disease and the conditions of the disease, not a single form of the reciprocal action, within a patient, can be entirely the same as another, but can be only *corresponding in form, i. e.*, similar, since the causes, as well as the sphere of their activity are most manifest, partly in an ætiological, and partly, in an individuo-biological respect according to *time, place and circumstance*.

The changes, now, of the organism, which lead us to recognize it as *sick*, are either mechanical, external or internal alterations of its interchange of matter, always in consequence of its relations to the outer world, to which, also, its fathers and forefathers belong. That

which remains unchanged, and, which, in this play of changes, preserves the whole of the organism, consists in the *periodical* re-creation, or *regeneration*, or, if we will, in its *self-preservation* in the constant change of form, according to the law of individual specification. This, the *constant*, in the midst of changes of formations and transformations, shows itself in sickness so fixed and unchanging, that, by itself and by means of its own action, it can overcome many forms of sickness, to which, frequently, only slight palliative aid, according to the causal law, is necessary. Such an overcoming of sickness is called a *process of recovery*, *regeneratio*, by way of distinction from an artificial cure, *restitutio*, and only the latter, can, according to the law of *reciprocal action*, neutralize in the whole of the organism a changed form of this action. Cures must so closely follow the specific laws of *Therapeia*, and quite other laws than those of the sciences elementary to *Therapeutics*, that they must indeed be obtainable without palliation and prophylaxis, for we are but seldom in condition to ward off all external accessory injurious influences.

Finally, *cure by nature* is hence a nonsensical combination of opposed and contradictory ideas, expressed by one term.

§. 43.

As *regulating contrivances*, which make possible the compensation of disturbances, Virchow considers "the compensations in the nervous system, which result either *by way of nutrition* or by *transfer* of the disturbances upon other parts; further, the *relieving critical act*; finally, the mutual relation between the *blood* and the organs, and compensation within the *tissues*, which also may become possible, by the removal of the changed parts, and by their renewed reparation in the way of nutrition."

According to Herrmann, however, the closer observation of the nervous system shows that, not only its effects upon the working organs of the body (and such he styles, by way of distinction from the nervous, those organs in which considerable quantities of force are set free, the labors of which are demonstrable and in which heat is evolved and mechanical labors are performed, hence the muscles, glands, parenchyma,) but also the effect of its parts upon each other, are to be considered as lyses. [Auflösungen.]

The following of his propositions are of weight in Pathology and Therapeutics:

1. If a nerve is no longer united with a living central organ, its excitability is, at first, increased in a marked degree, but then decreases

to total extinction. The course of this process follows more promptly in the nervous tracks nearer the centre, than in those more remote. In a nerve separated from its centre, but remaining in the body, chemical and morphological changes subsequently ensue, as the so-called fatty degenerations. 2. Constant *rest*, even of the nerves diminishes and destroys the excitability, and leads, finally, to fatty degeneration. Sensitive nerves, separated from the central organ, degenerate, as well in the peripheric as in the central portion; in the former, because it is separated from the central organ; in the latter, because it is no longer excited. 3. Continuous *activity* diminishes also, for a time, the excitability, and may even destroy it forever, as in case of weariness and exhaustion. In the first case the original condition may be restored by rest (reparation). 4. After the cessation of the polarizing stream, the excitability returns gradually to *its norm again after a change* in the opposite modification, in increased excitability after anelectrotonus, and, in decreasing irritability after catelectrotonus. 5. After an irritation, viz., from an excitement of a motor nerve, the result in the organ in which the nerve terminates *is all the stronger*, the more remote the irritated part of the nerve is from the organ of its termination.

These laws of nerve-life may be observed in a similar manner in spontaneous diseases, as well as in those produced by art in drug-proving, and from all it is clear that the nervous system has the same significance for our organism that electricity has for that of the earth.

§. 44.

Finally, there are three *material* regulators in the organism, to be found, as may easily be seen, in those bodies which are present in the organism in the greatest quantity, in water, fat, and albumen. This is the case not only in healthy but in diseased life.

We observe in many diseases, which, in and of themselves, occasion great loss of matter, that no nourishment is taken for weeks together, and yet the organism does not die; it does not even change, in fact, during this constant *lucrum cessans* and *damnum emergens*, the quality of its usual excretions. The whole mass of the body decreases, indeed, constantly, and the *quantity of fat*, especially, is subject to loss; the reception of granular fat frequently precedes, for a long time, the destruction of the cells. Deposited, more or less, in the cellular tissue, the fat holds the equipoise in many cases of waste. The amount of fat contained, for instance, in the brain, varies, indeed, within certain limits, in health and in sickness; but

although the latter causes a loss of fat in the rest of the body, often in the highest degree, yet, in the organs most essential to life, in the brain and its annexes, it is, nevertheless, not at all diminished.

Thus, also, the organic progressive, as well as the retrogressive metamorphosis proceeds uninterruptedly in diseases. Even the sources of reparation in the wasted parts of its organs, which are restored, in the form of lymph, to its blood, by means of the connective tissue, belong to the regulators of the interchange of matter, and must, as is, upon the whole, the nature of nitrogenous combinations, undergo very many degrees of change, before they pass over into the complication of atoms necessary for excretion, so that the *albuminates*, as the basis of the organism, for the production of new elementary forms, can make reparation for the parts lost in disease. Even parts of several secretions are taken up again, as of the bile in the intestinal canal, of the gastric juice, of the pancreatic and intestinal juices, and that in no small quantities.

The fat, as a poor conductor of heat, serves also to signalize the difference of temperature between the organism and the outer world, and, if the organism in its food, receives a greater quantity of albuminates and carbo-hydrates than is required for keeping up the function of life and respiration, then the former accumulates in the form of flesh and cell-tissue, etc., while the non-nitrogenous are changed into fat. A part of the fat is hence not only supplied by food, but is produced by a *process of reduction* out of the carbo-hydrates. Hence the organism possesses the property of forming the greatest part of its fat by de-oxidation of albuminates and carbo-hydrates.

While, as a rule, at an advanced age, the amount of water decreases and that of connective tissue increases, water is nevertheless always at hand, here and there in varying quantities, in order to meet other contingencies of loss. Even the amount of water in the entire brain is changed by age and disease, and oscillates within defined limits, and even in hydrocephalus it fills up a hiatus. While, further, carbon has great relationship to oxygen, the organism itself retains the power to possess itself constantly of the elements of water. The water of the organism is also a regulator of heat; it is at the same time matter for imbibition, provides for the permeability of the most varied substances, and influences their electric power of conduction.

Without these functions, the support of the organism during a continued sickness were impossible.

Fat, water, and albuminates, we hence see, hold the scales for the most varied pathological conditions and occurrences, as real *tempering* moderators of the interchange of matter.

As far now as the organs are concerned, we know surely that their functions are increased in proportion as one of them becomes sick, and, in so far, compensations may occur. The nervous system, however, when it is once concerned in an altered interchange of matter, and is not itself diseased, can do nothing, either for or against it, and remains, as long as it lives, dependent upon the state of the blood, and can assume no other form of compensation, even as regards space, beyond the tension and relaxation which is left to it.

But to think of *active* moderators, of relieving *acts*, can only happen to the physiological school, since in the whole organism, whether in its physiological or pathological states, it sees only the causal law prevailing and not the reciprocal action. From this arises also the idea of *antagonism* which expresses a hostile opposition of diseases. But in the organism, even in its morbid changes, every thing is "on good terms." Its motions, in connection with causes of disease, consist in the repulsion or attraction according to the laws of matter coming in contact with it and those of its own matter. But it can combat nothing; still less can the physician. Because in social life the superficial view makes all effects dependent upon active causes, as in case of a machine, so the folly is perpetrated, of transferring these current views to the movements within the organism; active moderators are set up which shall rectify disturbances. In obedience to this, one must seek, then, to imitate the motions of the so-called crisis, or, resist or remove, by derivation, whatever will not obey, and when all this does not suffice, then a *vis medicatrix naturæ* must be brought into action, or a curative power, under the ægis of an expectant method, à la *Fabius cunctator*. If one thinks, however, of appealing to the waiting, expectant method, then the combating or derivating means have no other significance than that of a very doubtful *a priori* experiment.

§. 45.

Though teleological views are allowed in biology, they yet cannot suffice either in pathology or therapeutics. We can only rely upon the activity of the organism in sickness, in so far as we have investigated its activity according to the laws of nature. But we have shown in §. 41, that the organism, in its interior, is never moved merely *actively*, but always according to the laws of reciprocal action, actively and passively at the same time. Hence the supposition that the crisis, or the compensations and disturbances consist in a *freeing*, or *antagonistic*, or *reactive action* of the organism is, accordingly, to the laws of nature false, a teleological fiction. Molecular substances

and their forces within the organism, as out of it, conduct themselves according to the relations into which they are brought. The simultaneous activity and passivity of the body announces itself even under the most varied circumstances.

When, for instance, salt is dissolved in water, it remains passive, one may say. But since it changes the properties of the water, it may also be called active. That is not, however, the language of science, and hence the empty phrases about *freeing critical acts* must be rejected.

This idealism of an aim-theory is opposed in natural sciences not only by reason, by virtue of its maxims, *everywhere to guard against the needless reduplication of principles in every possible way*, but nature itself shows us nothing but mechanics, chemistry, etc.

Hence, if we find an event conformable to an end, *we learn nothing new thereby*; we attribute this peculiarity even as a predicate thereto, as the freeing act to the crisis; hence such aim-ideas are utterly different from logical and theoretical inferences, and necessarily lead to errors, when phenomena in bodies are to be explained, as the so-called critical movements of the diseased organism.

Two principles, for example, the mechanical and teleological, can not be united for the sake of giving an explanation of one and the same natural event. From the ovum to death the self-activity of the organism operates constantly according to mechanical laws also, and *it has no conception of what it shall produce*, because all this occurs from logical necessity, and the organism consists of an entwining of cause and effect, so that no part is in vain. Were any phenomena in the organism *possible by any causality according to an aim*, then the mechanics of nature, without design or aim, would be able neither to produce nor to cure them. Were there really an *artificial* activity in nature, and did an *aim* lie at the bottom of its formations and transformations, as there is with the physician when he undertakes a cure, then there must be certain products of nature which should be considered not as products of nature, but as *products of art*, the possibility of which could not be conceived of from the laws of nature, but only according to a purpose, that is, from a causality according to ideas. In fact, the idea of a crisis, according to Virchow, presents itself in this way. Supposing the crisis itself to be an actual *purpose of nature*, he fell into an error of judgment, which has a certain similarity to an optical delusion.

§. 46.

It is well known that the greatest sages have stumbled over this problem. But to define disease, and that which is connected therewith, we need, first of all, to establish that of which disease is a real accident; without this the idea of a disease ever remains incomplete. But no one in the physiological school has, to this day, an idea of *health*. To the question, who is sick, every one is ready with an answer, giving this or that name of a disease, but, for the question, who is well? the answer is lacking, because the idea of health contains a negative deduction, which is based upon the positive fact of disease. Could we give life to the works of plastic art, then should we realize the ideal of health. But every mortal varies, more or less, from the form of an Apollo or Venus.

Thus the idea of health seems to be a mere speculation, a bare intellectual product, not realized in the life of man, nor an object of sensible perception; hence these very numerous pictures of fancy concerning what shall be called healthy.

Through the midst of the apparently infinite varieties of forms, there run, however, many phenomena which point to a law as their cause. In the forms of human individuals, we find either a minus or plus in relation to the never-attained end of an artistic ideal. If we now have to do with relations of a unit of reciprocal action, whose forms and motions oscillate between a plus and a minus, then this must have a limit. All forms and functions, obedient to one and the same law of specification, must move, as regards that which is constant in them, around a quantitative proportion common to them all, from which they cannot deviate too far, without undergoing a *change*. Hence health rests *upon a harmony of the relations in which the parts of the organism stand, on one side to each other, and on the other to its whole*, and this harmony is grounded upon the laws of proportionality, set forth in §. 24, which must govern, not only the forms, but, according to the law of specification, the functions also of the organism.

§. 47.

Let us seek to apply this mathematical law of proportionality to that function which is called crisis, whose law, since the days of Hippocrates, himself included, to the present hour, has troubled all physicians with its obscurity; for with the numbers of the days, chiefly

critical, 3, 5, 7, 13, 21, it seems impossible to connect any normal relation whatever, and least of all, a natural law.

But, since nothing is explained or proved by itself, we must at present, set aside the critical days and choose experiments which were undertaken *without any thought* whatever of critical days, in order to discover the same or similar relations; for the organism must exhibit the laws pertaining to it under the most varied conditions, and that without any and every exception, else it would be without law.

We will observe, first, the organism in its specific activity, without any disturbing influence but that of deprivation of food. To this point we find, in Ludwig's *Lehrbuch der Physiologie*, (1. Aufl., pag. 432), a series of experiments, and the following statements:

A cat weighing a kilogramme gave, in twenty-four hours, in grammes.

1	2	3	4	5	6	7	8
<i>Day after the last Feeding</i>	<i>Water through Kidneys and Intestines.</i>	<i>Urea.</i>	<i>SO₃</i>	<i>PO₅</i>	<i>Sum of Inorganic Constituents.</i>	<i>Carbon Exhaled</i>	<i>Dry Faeces.</i>
1	37.09 +	3.437 +	0.133 +	0.144 +	0.518 +	5.641 +	0.503 —
2	22.00 —	2.298 —	0.092 —	0.109 —	0.359 —	5.620 —	0.540 +
3	19.39 —	1.887 —	0.080 —	0.104 —	0.309 —	5.883 +	0.484 —
4	19.80 +	1.732 —	0.077 —	0.104 0	0.294 —	5.658 —	0.502 +
5	25.39 +	2.227 +	0.091 +	0.129 +	0.333 +	5.594 —	0.779 +
6	20.31 —	2.133 —	0.079 —	0.114 —	0.281 —	5.712 +	0.291 —
7	19.25 —	1.968 —	0.075 —	0.113 —	0.271 —	5.642 —	0.339 +
8	21.35 +	2.091 +	0.083 +	0.131 +	0.301 +	5.670 +	0.592 +
9	23.26 +	2.263 +	0.083 0	0.119 —	0.301 0	5.971 +	0.982 +
10	19.82 —	1.907 —	0.077 —	0.113 —	0.277 —	6.127 —	0.745 —
11	18.22 —	1.723 —	0.073 —	0.110 —	0.264 —	6.024 —	0.643 —
12	18.11 —	1.648 —	0.062 —	0.093 —	0.227 —	6.310 +	0.525 —
13	23.33 +	2.166 +	0.087 +	0.115 +	0.303 +	6.439 +	0.287 —
14	25.07 +	2.224 +	0.095 +	0.113 +	0.321 +	6.423 +	0.224 —
15	26.76 +	2.052 —	0.084 —	0.104 —	0.296 —	6.534 +	0.223 —
16	32.78 +	2.154 +	0.085 +	0.109 —	0.307 +	6.350 —	0.172 —
17	19.93 —	1.216 —	0.049 —	0.065 +	0.182 —	5.850 —	0.119 —
18	10.21 —	0.597 +	0.024 —	0.036 —	0.095 —	4.791 —	0.244 +

From these laborious experiments it was concluded, "1. That the daily expired amount of Carbon absolutely considered, is greatest in the first eight days of starvation, and least in the last two days before death; relatively to the weight of the body, however, it maintains itself about the same in the first nine days; in the succeeding days it increases, and diminishes in the last two days, very decidedly. 2. That the amount of urea excreted, diminishes very considerably during the first two days of starvation, then remains about the same to the last two days before death, and in these last two days decreases in a very

marked manner. 3. That the quantity of SO_3 and PO_5 in the urine increases during the period of starvation, on the contrary, the Cl. disappears entirely. The proportion of SO_3 to PO_5 remains the same till death."

That is all which Physiology can gather from such experiments. It will be readily seen that the observation is directed to the causal law, viz., to discover in what direct proportion the loss of various parts of the body stand to the time in which food is withheld.

§. 48.

But the quantitative causal law is not the law of the organism, and far more may be inferred from such experiments. It would have been of far greater worth for Pathology and Therapeia, to have discovered in what proportion we find the specific form of *reciprocal action* to have taken part in these experiments.

For this purpose we will arrange the losses for the separate days, as they appear, with the signs + and — appropriate to them, so that the following table shows the change of the increasing and diminishing loss:

1	2	3	4	5	6	7	8
<i>Days after the last Feeding.</i>	<i>Water through Kid- neys and Intestines.</i>	<i>Urea.</i>	<i>SO_3</i>	<i>PO_5</i>	<i>Sum of Inorganic Constituents.</i>	<i>Carbon Exhaled.</i>	<i>Dry Fæces.</i>
1							
2							+
3						+	
4	+			||			+
5	+	+	+	+	+		+
6						+	
7							
8	+	+	||	+	||	+	+
9	+	+			||		+
10							
11							
12						+	
13	+	+	+	+	+	+	
14	+	+	+		+	—	
15	+					+	
16	+	+	+	—	+		
17				+			
18		+					+

This result is surely something more than chance, for by far the greatest losses fall on the 5th, 8th and 13th days. If we should often

find this to be the case, it would clearly indicate an organic law of reciprocal action.

For this purpose, I will introduce two more examples, taken from the same work, and prefer, first, that regarding the opposite treatment of the organism, by the *withholding of water* from doves, in which the figures of the second column denote the weight of the daily final expenditures for the unit of the weight of the body; the figures in the first column, the days in which water was withheld. Here again, the most striking loss was on the 5th, 8th and 13th days. The next example relates to the human organism, in its *undisturbed reciprocal action* with the external world, during its growth in years. Whether we observe days or years in their relations, it must remain just the same, as long as *stated*, and not interrupted periods, can be taken into the account. If a law lies concealed in such proportions, it must, *a priori*, according to the parts therein interested, be related during the period of growth, inversely as during the deprivations of food, or other disturbances.

1	2
1	0,188
2	0,106 —
3	0,078 —
4	0,068 —
5	0,092 +
6	0,077 —
7	0,089 +
8	0,106 +
9	0,085 —
10	0,102 +
11	0,098 —
12	0,094 —
13	0,134 +
14	0,019 —

1	2	3
Years.	Increase of the Weight of the Body, reduced to Kilogrammes.	
	Male.	Female.
1	1,960	2,020
2	0,200	0,214 +
3	0,099	0,105
4	0,141 +	0,103
5	0,108	0,105 +
6	0,093	0,115 +
7	0,108 +	0,096
8	0,087	0,087
9	0,091 +	0,119 +
10	0,082	0,101
11	0,105 +	0,900
12	0,100	0,162 +
13	0,153 +	0,104
13	0,027	0,114 +
15	0,125	0,100
16	0,138 +	0,079
17	0,074	0,083 +
18	0,095 +	0,078

Thus the increments of weight according to years, fall here upon the same figures in case of the male sex, as according to days, do the changes which the organism had experienced and under which it brought about increased secretions, as the so-called critical days teach. The female sex, on the contrary, which represents chiefly the cell-life, *follows* quite another proportion, a fact which may serve as a leading maxim for investigations upon the variations of the functions of the brain and spinal marrow in its whole historic range, as well as in a smaller sphere, *e. g.*, in relation to the greater viability of children born on the seventh, over those born on the eighth month. These examples might be easily increased, but these few, point with all precision to an organic law. Let us now compare all the days in which, in various acute diseases, critical motions and lyses, or losses at the sick-bed, have been observed by practical physicians in all ages. They were observed on the 3rd, 5th, 7th, 9th, 11th, 13th, 15th, 17th, 19th, 21st, 23rd, 25th, 27th, 29th, etc., days of the sickness; *most regularly and most frequently, however*, on the 3rd, 5th, 7th, 13th, and 21st; manifest lyses or death sometimes even on the 35th. While in the first series, the constant difference of 2 exists, the second seems to be void of all regularity; and while it is easy to explain the first, from the causal law, this law cannot be applied to the second. No doubt, however, that even in the latter series, but parts of a whole, as regards its functions of accumulation [growth] or excretion are presented. Hence, if we hold fast to the experiences that in 34 or 35 days the organism regenerates itself in its component parts, according to the weights of the receipts and expenditures, and, without hesitating, assume the period of 34 days as a unit, since on the 35th, as a critical day, increased expenditures are made again, then we can, with this figure, proceed according to the mathematical proposition of the *linea media et extrema ratione secta*.

Accordingly, the following law of a constant proportion results therefrom; for we find, in accordance to it, 34.0000: 21.0131: 12.9869: 8.0262; 4.9607: 3.0655. Comparing these numbers with the critical days, we have the following:

<i>Linea media et extrema ratione secta.</i>	<i>Difference.</i>	<i>Critical Days.</i>
34.0000	+ 1,0000 =	35
21.0131	— 0,0131 =	21
12.9869	+ 0,0131 =	13
8.0262	— 1,0262 =	7
4.9607	+ 0,0393 =	5
3.0655	— 0,0655 =	3

It is remarkable in this difference that $131 + 131 = 262$; $262 + 131 = 393$; $393 + 262 = 655$.

§. 49.

As we see, from these tables and calculations, the 21st, 7th, and 3rd days are found just in the minus of difference, and, it is these very days which have been acknowledged always as the most unequivocally critical, although the others also, the 5th, 13th, and 31st, can mathematically be proved as such. That the 3rd day does not stand out so prominently in the tables, is explained by the manner of the experiments.

We find, according to this mathematical law of the first series, proportional oscillations, which all nature seems to obey forever. All phenomena, which we see connected with the laws of life, all self-activity from the molecular powers, to the very motion of the earth itself, we observe in constant change of equipoise, within determinate limits of accommodation. Such proportions of accommodation between the extremes, which, in the *series* of differences, express the maximum and minimum of possible positions of equipoise, we find at the sick-bed, and, for centuries have called them crises, up to the present day, because man interprets every phenomenon which indicates to him a change of ordinary relations, as he receives it by his organs of sense. But a law must be at the bottom of that which returns periodically. The crisis is unintelligible by itself; nevertheless, no one ever tired in his attempts to explain the crisis from itself, and every one, on account of these false leading maxims, must make a wreck with his inquiries on the sands of hypothesis. However we know the south pole to be inconceivable without the north pole — man without woman, hence should the crisis, the excretion be possible and intelligible without the accumulation? Each individual being exists always in the midst of such oscillations only, as we observed in the functions of the adult, and, even in its egg-cell, which constantly oscillates between life and death.

Hence, if we take, in our case, the period of 34 days, which passes in the alternations of formations and transformations, in the organism, as a unit, and this to be $= G$, the variation denoting the maximum of every motion to be M , and the motion expressing the minus of difference to be $= m$; then we have, according to that mathematical law, the general formula, for investigations of this kind:

$$\sqrt{G^2 + G\frac{2}{4}} - \frac{G}{2}$$

and thus we have $m = G - M$. consequently, *a law which indicates the constant self-active motions of the organism, from one state of equipoise into the other*, so that, in order to understand this, we have no need to substitute a moderator, made for the very purpose, or any relieving acts, as is still necessary for the physiological school. I leave to the reader other details and the collection of more combinations and experiments according to this guiding maxim. To him, then, the application of the numeric method avails in further investigations, but only in those cases *for which the natural law, that governs them, has already been found*. But to *discover* laws of nature, for that, the numeric method is insufficient.

For my present object, I have, in the meantime, established, that the organic motions of function and nutrition cannot be measured according to the round numbers of the causal law, nor be confined within the idea, therewith connected, of simple factors, nor be used, as they are in physiology and chemistry, by addition and subtraction and simple equations; but only by the general law of the periodic return of the organic activities, of which that law of nature, found by calculation, forms a species, just like another, the law of equivalence of heat and labor. Zeising established this proportional law as a fundamental law, for the articulation and formation of the human body, and I, for its *functions*, and, as this law contains definitions regarding the *proportional oscillations of the organism*, I leave it, under this name, to further inquiries. Why it was so clearly perceptible in the organism in its changed form only, while it holds sway just as constantly in the unchanged organism, lies not in the law itself, but in this, that the operations of nature are generally most easily and successfully observed where it [nature] seems to be the most passive; that we generally consider the chief thing, to be that which is within grasp, and so much so, that what is less accessible, remains unconsidered.

This law, the anatomical basis of which is the cell, and the physical basis of which is the specific diosmosis of the cell, must hence be that of critical motions also.

These critical motions are merely the expression of the extremes of the same oscillations, *which, in the unchanged condition of the organism*, complete, *within more narrow limits*, those motions *which are called health*. The condition of *health* is thus one which can be seized in no moment of time, hence is a *negative* idea, and this law belongs essentially in the circle of the collective idea of life force, and indeed forms its centre, if it were not better to give it up altogether.

The idea of health is a negative idea, without reality; it is taken from the observation of contingent conditions of equilibrium, which are so far from being positive, that any one of them may, at any moment, be turned to the contrary, in alternating forms, of which one is always the negation of the other.

The idea of health declares that a definite reality belongs indeed to the organism, but it is one which is limited, for the want of an unchangeable form.

If, hence, the conception of health exists only in the idea, there exists, on the other hand, no idea of disease, but only one of its realities, since its cause is constantly operative so long as the conditions thereto are present, and the fluctuations which we therein observe *arise, not from the causes of disease, but only from the natural sympathy of the oscillations of the organism*, as long as these also are not overcome. The idea of disease is hence of a concrete, that of health, of an abstract nature.

§. 50.

The crisis is hence a process which, dependent upon *physiological laws*, quite as necessarily accompanies the *pathological process*, just as the *evening exacerbations*, in diseases, occur at the time of increased excretion of carbon, without reparation by means of increased receipt of oxygen.

Because improvement follows the so-called crisis, the crisis is hence taken, in childish simplicity, for the *cause of the improvement*, but, according to the same fallacy by which night might be taken for the cause of day. These periodic, so-called critical, phenomena of increased discharge, hence, have nothing to do with the improvement in disease, as *cause*, but are only *concomitants*, for *physiological reasons*.

Since these so-called crises ensue at the same time at which those excretions occur periodically in a *physiological state*, the question, whether these periodical oscillations belong also to the life of the *diseased* organism or not, is decided by the *law of causation*, for, since the subsequent cannot be the cause of the antecedent, and the healthy life must always be assumed before the diseased, so the so-called crisis is a necessity of the healthy organism, hence, accidental as regards disease, and not dependent upon it.

The physiological school, holding fast to Virchow's *freeing act*, must, on the contrary, under all circumstances (and closely bound by this false notion), *spur up* every delay of this freeing act, it must force the perspiration and give remedies promoting urination, etc. But

who shall tell us whether we shall discipline this delaying freeing act, in any given case, by the production of sweat, or of diarrhœa, or by the disturbances of other functions, and of what?

Instead of a crisis resulting in spite of all these proceedings, the patient dies on the 3rd, 5th, 7th, 13th, 28th, 35th day; or if he survives these days, he gets better, subjectively as well as objectively, while regularly, upon these very days, in the midst of increased evacuations, all the phenomena show themselves aggravated. This process, which never is, nor can be, brought into immediate connection with an external cause, expresses only a law peculiar to the organism, in accordance with which it spontaneously produces, on those very days, much more copious evacuations. If we add thereto the remaining conditions of waste, in acute diseases, taking place concurrently with the others, it appears *natural* that, on these days, the disease should appear externally more severe and *only on this account*, that, after their cessation, there should be a striking improvement. It is a well known observation, that this periodical change always ceases to accompany the course of a disease when it is suppressed by unsuitable medication, or by marked debility produced thereby, or when the curative effect of a remedy has been decidedly established. In the spontaneous course of an acute disease, the critical movements never fail, and thereby give a very powerful differential diagnosis between a successful and unsuccessful treatment.

§. 51.

Having now specified the most important physiological laws, according to which the spontaneous processes of re-formation of the organism from sickness take their course, *i. e.*, the processes of *recovery* from sickness, it now remains to combat still other errors of Virchow. For the explanation of the processes of disease and of cure, he points to the process of catalysis. The so-called catalytic process, however, itself needs explanation, so this attempt to explain a problem by an hypothesis, not yet established, does violence to the first rules of logic, which rejects such conclusions as fallacies in the form of a *petitio principii*.

But just as disease is a disturbance of nutrition and function, so the process in healing can depend upon nothing else *but on the laws of nutrition*.

Virchow, in setting up his catalysis, not only makes an *exception* to his vital force and his other forces, but, in so doing, becomes quite untrue also to his cellular pathology.

As little as the *hereditary* origin of many diseases needs the vain assumption of catalysis, as explanation, so little can the succession of *acquired* diseases be explained, according to Virchow, as the after-effect of any exciter, not closely connected with the presence of the latter, and if this after-effect, together with the hereditary origin, were to present the so-called *constitutionalismus*, this, Virchow holds, would, nevertheless, bear no comparison with the analysis of the phenomena of reproduction. Regarding this comparison, we only know that the qualities of the cell-life of the child come from the mother, and those of the connective tissue from the father. The organ most rich in cells, for instance, is the brain, and so we observe, in the first respect, that the man of the greatest genius may have a son far inferior to him in intelligence, if this is also the case with the mother. In the latter respect, on the contrary, the form of the body, which depends upon the connective tissue, is improved by the father. The older physicians discriminated between strict and lax-fibre, but we, between predominant development of the connective tissue or of the cells. Although the former generally characterizes the masculine, and the latter the feminine sex, yet there are marriages, as we have noticed in many families, in which, in this mutual relation, for example, the cell-nature of the father overbalances that of the mother, and so, for a long time, daughters are born, until, in the course of years, this relation becomes balanced or reversed.

But if the relation is well balanced, then, naturally, the sex of the child is determined by the greater or less intensity of the functions. The natural dissimilarity between the ovum and the spermatozoa can be so far diminished by intermarriages continued among relations, that manifest sterility, diminished capacity for conception ensues, or, where children are nevertheless born, they carry with them that impoverishment of vitality which announces itself by death shortly before or after birth, or, if they hold out longer, by nervous diseases of all kinds, epilepsy, deaf-mutism, idiocy and cretinism.

We must not, however, confound this manifold variety of form, which is permitted in the wide compass of the constant, with the presence of an exception.

Such hereditary productions are no more subsequent effects than *exceptions*; they result according to known rules, even with, apparently, the greatest irregularity.

Ignorance of the ever-present laws of Nature permits the mind to set up subjective judgments, and notions void of significance, such as that of catalysis or secondary effects, as bases of explanation, as it does, also, the far-spread prejudice that all general truths are subject to

exceptions, by which the back-door is ever left open to skepticism and dogma. Only the crude *generalizations* of insufficient observations have exceptions, for there is no law of nature for ninety-nine cases, and an exception for the hundredth. No, there are ever laws for at least *two bodies*, as the law of the seminal animalcule and that of the ovum, each one of which, in all cases, strives to maintain itself, and both form, by their reciprocal action, within a surrounding, *prior* to them, a new specific form. What is called exception, depends only upon the surrounding, upon the outer world, not upon the laws of the bodies with their effects and counter-effects themselves; the accidental influences of the external world modify the form only within the law. Hence, also, *physiological death*, the reduction (no longer compatible with life) of the organism to carbonic acid, water, ammonia, and ashy constituents, forms *no exception* to the natural laws of life, but inheres in life and its surroundings, and, if the balloon seems to rise, contrary to the law of gravitation, yet it forms an exception to the laws of Nature only to superficial observation, for it must obey them, as life, according to its physiological laws, must indeed necessarily lead to death, *but not* necessarily to disease.

But how apparently insignificant those and other hereditary dispositions to disease are, as regards matter, is seen by the seminal and ovular cells, which forward to each other the material causes of disease in *infinite invisibly small quantities*, *i. e.*, in molecular form. This relation also corresponds to the laws of nutrition; for, since its formations and transformations are much better brought about by the smallest molecular quantity, than by the larger, we are thus shown that the nutritive material necessary for the organism, *cannot* be considered *according to weight alone*.

Hence the future *pathology* is not *cellular*, for I maintain, and have shown, that we can have only a *molecular pathology and therapeutics*; for the cells are *not the ultimate elements of life*; these we find in the *molecules and forces* which construct the cell with the help of the surrounding structures.

We, hence, can never expect, in therapeutics, to act upon the cell- and connective-tissue-forms as a whole, but only upon their molecules and their molecular forces, as every rational practice teaches; such a practice must rest upon the *reciprocal action* of the organism with bodies of the external world, and not merely upon quantitative *causal*, progressively increasing influences, as usually occurs in the physiological school, and which must ever be of an injurious nature.

Acquired diseases, finally, are by no means the only conditions of the character of the constitution [*constitutionalismus*]; on the contrary, this

rests partly upon hereditary and partly upon acquired *conditions*; while diseases themselves, without exception, are caused from *without*.

§. 52.

By *diseases* of the organism, we must consequently understand specific states and processes, which present *changed* forms of its specification, proceeding from the combined operations of inward conditions and outward causes, and are inconsistent with the change of its physiological conditions and processes. We call these forms *processes of disease*. In them, we discriminate according to the law of *continuity* the succession of motions appearing with them, in groups of symptoms and stages.

Virchow holds, on the contrary, "Because the same law of nature manifests itself differently, according to the conditions under which it appears, the *difference between the sick and the sound body* could likewise be based *only upon the difference of conditions* under which the laws of life manifest themselves. Hence, if we would have pathological systems, we are not allowed, as readily appears, to *construct nosological*, but *ætiological* systems only. Not the disease, he thinks, is that which determines, but the conditions. Thus the question is, to know *under what conditions, in a particular disease, a particular medicine is to be chosen*."

Even this discrimination, which Virchow makes between the sick and the sound body, is just as false, according to the foregoing, as his notions about the conditions of disease.

If now we wish to construct nosological systems, that, it is true, is taught us by Virchow, but, by Rademacher, the construction of ætiological systems.

§. 53.

DIAGNOSIS, INDICATION AND PROGNOSIS.

But if a Homœopath sees pass before him, *e. g.*, a succession of symptoms of disease, partly subjective and partly, by diagnostic aids established objective, and he asks himself, on what do these depend? he then seeks the basis for one and the other, *analyzing* them, as he does, singly according to their pathological significance, in order to abstract the *general*, which is not given him with the perception of the separate symptoms, **upon which, however, they must depend.**

The symptoms of the patient we indicate only by *ideas*. They come separately in the course of the process of the disease, and in succession, and, in so far, are removed from their connection.

Hence we must bring them together again logically, by inference, and put them where they originated. To this end we must first learn analytically the *manner of their connection*, and, *synthetically*, *rise to the grounds* which teach us, whence they have arisen.

The physiological school proceeds in the case, not by abstraction, but *constructively*. It represents to itself the various symptoms of disease by grouping them into general *ideas*, gained by sensible observation, *i. e.*, it constructs, for this purpose, forms, its forms of disease, as, inflammation, fever, cholera, epilepsy, etc., and thinks, in this manner, to have found out *realities*.

But these pictures of disease are no realities, from which we can learn the manner of connection of their various symptoms, which is already apparent from this, that all forms of disease present different pictures, with different individuals, out of which, hence, it is impossible to construct a general predominant unit.

Hence, these pictures, or forms of disease, *cannot be the ground* from which their symptoms arise, and hence must, for the practice of the physician, be void of any and every value, and something else must lie at the bottom, some *necessity which precedes them*. But because this is unknown to the physiological school, therefore with its constructing method, it naturally falls into the other error of its arbitrarily adopted fundamental principle, into the *contraria contrariis curantur*.

The Homœopath *constructs nothing* at the sick-bed, least of all this or that picture of disease, all of which are void of reality, hence useless as regards every exact judgment, and leading, in spite of all "superfine" diagnosis, to erroneous indications and prognosis; but he *abstracts*, first from the symptoms, the individuality of the patients in connection with the state of the outer world, in which, from the beginning of their lives to the present day, they existed, and out of which, as a result, the *bodily constitution* is developed.

The bodily constitution is hence the *general*; the constitutional states present, therefore, those very realities from which the kind of all symptoms of disease originates, since they alone can contain the conditions for becoming diseased, and must not be confounded with the *causes* of disease.

§. 54.

In Wunderlich's Archiv für Heilkunde, (the predicate "physiologische" has been left off since 1860,) there is, in that very year, H. 2, a remarkable article from Wunderlich himself, where he says, among other things: "the points of attack for therapeutics are, *causal and urgent symptomatic indications excepted*, not the local disturbances which give name to the disease, but it is the *entire organism*; this must be the object to be aimed at." An assertion which sounds as if it might have been borrowed from me; but, impossible, for how did he think to make it good?

He says, "the degree of depression, of nervous excitement, the conditions of the circulation, the fever, the collapse, the composition of the blood, the increase and decrease of the weight of the body, are the things upon which chiefly hang the prognosis of the disease; upon these the chief indications of the treatment have to be based."

But it is impossible that the results of causes and conditions of diseases can lead to that constitutional Therapy which Homœopathy possesses, and he seems himself to mistrust the fruitfulness of his train of thought, for he proceeds: "here is the widest and, hitherto, most unwrought, field for practical observation, and for the establishment of the most certain rules, and thus also have analysis and measurement to consider the relations of the constitution."

Thus Wunderlich even is unable to rise above the constructive method which, as well as local pathology, must lead to errors in Therapy, because it aims at ideal representations, hence at constant forms and conditions of our organism, while this organism brings to our view only changing conditions.

Besides, Wunderlich means to infer from the above mentioned *results* of disease, instead of from their *conditions*, the character of the bodily constitution, which clearly is a preposterous, and hence a nonsensical, undertaking.

§. 55.

In opposition to Wunderlich's views, Dr. Kissel, a pupil of Rademacher, in the Prospectus to his Manual of Special Pathology and Therapy, (1863) asserts: "It is the *ætiological Therapy* to which alone the future belongs, since it rests upon the relation of nutritive and remedial agents to physico-chemical *fundamental disturbances*, in consequence of which the morbid processes of the organism are formed."

Leaving out of view that this relation hardly stands out very prominently in this Manual, yet it is established, by both these examples, that, while Wunderlich has only the *bodily constitution* in view, Kissel, on the other hand, bases his (Rademacher's) doctrine upon the outer *surrounding* of the organism; he is led, nevertheless, by his principle, as well as by his Therapy, into a multitude of doubts, since, for example, p. 136, he gives a prominent position to the following opinion: "A criticism of the ætiology of the individual disease, makes it clear that it is *very deficient*, and, in concrete cases, does not suffice to discover the primary seat, the kind and proximate cause, or ætiological fundamental conditions of the sickness of the individual."

This school of Rademacher does not construct anything, it is true, but, nevertheless, *combines*, from the peculiarities of the several symptoms, compared with previous observations, the so-called epidemic constitution, the presence of a cause as yet unknown; however, on the strength of this combination, it makes a so-called therapeutic experiment, *e. g.*, with Natr. nitr.; if that does not relieve, with Iron, and if this again fails, then with Copper, etc. Hence, it is, as regards its therapy, in a state of imperfect induction, even though one of their remedies, which has once hit the mark, possibly affords help in various diseases, so long as ætiological conditions, thereto necessary, apparently exist.

Thus to discover a rational Therapy, Wunderlich first attempts to construct various constitutional patterns. A vain attempt, because this construction strives to fix the movable life in set forms; Kissel, however, has a combination, although an unsuccessful one, for this end, and an imperfect induction, hence a Therapy, even if it is but a fragmentary one; thus something is accomplished; although, by it, truth and falsehood cannot be discriminated *a priori*, but must first be known *ex juvantibus et nocentibus*, hence *ex post*, thus, only empirically.

On the contrary, the whole tendency of Homœopathy shows, as I was the first to point out, that it alone *knows the law of the relation of constitutional and ætiological fundamental views*, because, in Homœopathy, *by its drug-provings the organism may be recognized as a system of external influences and internal counter-actions*, and the cleaving of *this truth* into two different curative methods, foreign to it, is, therefore, and naturally must be, without any sure result.

Hence, we have in diseases, only that which the senses can comprehend, and then, as already said, we have to abstract from this the *general*, the prominent *bodily constitution* by means of *comparison*

with the drug-provings, out of which, as we shall see anon, for each individual, a peculiar combination called *constitution* presents itself.

This *general* is just the important thing, because it *precedes* the particulars; it is this general, by which peculiarities of both ætiological and constitutional necessities become clear to us. But a picture, a form of a bodily constitution, never can be constructed, even out of the anatomico-physiological composition of our bodies; these forms [of a bodily constitution] can only be *abstracted*; for that composition teaches us only various *parts* of our bodies, as organs, tissues, cells, etc., while the bodily constitution makes us know the various *materials* of all these parts.

The opponents of Homœopathy form quite different ideas in this important question, because they adopt, neither the Homœopathic drug-provings, nor the Homœopathic dose, and hence, know nothing of the action and counter-action of the *molecular bodies* in our organism, nor even have the faintest idea thereof.

§. 56.

Virchow holds, finally, "that were biology complete, did we know the laws of life and the conditions of their manifestations exactly, did we know precisely the result of every change of these conditions, *then would we have a rational Therapy.*"

We may twist and turn this proposition as we will, it remains and contains an impracticability. Let us take the eye, for example, whose biological and ætiological conditions we know just as exactly as the manifestations of the laws of its life, yet I could, under the change of these biological conditions, as they occur, for instance, in Keratitis, certainly never have hit upon anything exact in the choice of the remedy, nor ever have found any rational Therapy, or, indeed, any at all, for this form of inflammation.

In the midst of the strife between physiological and pathological conception, a collaborator of the *Archiv für physiologische Heilkunde* for the year 1847, exclaims in triumph, among other things, "It is surely very strange, though, for writers to call an inflammation Scleritis, in which the part chiefly suffering, is not the sclerotica, but the cornea or iris," having invalidated the doctrine set forth by Beer, Walther, Jäger, Sichel, "that one could discern from an inflammation of the eyes, whether it be caused by a scrofulous, rheumatic catarrhal, arthritic, or abdomino-hæmorrhoidal dyscrasia," by the recent physiological, or rather pathological experience, that that red ring about the cornea, (which, according to Walther, indicates a rheu-

matic sclerotitis), is the result of a Keratitis. He thinks that this discovery has a purely practical, *i. e.*, therapeutical significance. This, however, has not been, as yet, exemplified in his school, for they still attempt to cure this inflammation with the same external and internal remedies as before. In our day, moreover, the specific distinction of these inflammations has been discovered. It has been found that Keratitis occurs as a pure disturbance of nutrition, as parenchymatous, lymphatic, chronic, or as a secondary disturbance, which, in every case, is preceded by hyperæmia in other structures of the bulb, and, in which, the increased nutritive plasma shows itself mingled with variously constituted fibrinous matter. Nevertheless, these investigations have *hit upon nothing decisive, as regards the choice of a remedy*, for now, as heretofore, in this school, they seek to cure these inflammations of the eyes with outward applications of præcipitate, lunar caustic, calomel, etc., and internally with Tart. emetic, Belladonna, Sambucus, Kali hyd., Colchicum, Digitalis, Conium, Sarsaparilla, etc., which, to-day, as formerly, fail oftener than they succeed.

Where, even in this example — and this may serve for all without exception, since the system of the school announces itself everywhere quite the same — where has a sure remedy become known, notwithstanding all the physiological or pathological discoveries, or even an empirical remedy founded upon natural laws? In regard to Therapy, everything remains the same. All the decidedly great advances in Pathology and Physiology contribute *literally nothing* to the choice of a remedy, still less have they discovered any sure one. Never has any discovery been made which would lead to the indications for Belladonna, Tart. emetic, etc.; on the contrary, one practitioner simply copies after another.

§. 57.

Hence, in cases for which the physiological school knows no remedy at all, not even an empirical one, it very rashly comes to the *conviction* that they are altogether incurable, or must be delivered over to surgery.

We shall have sufficient opportunity to show that, by means and upon the strength of physiological and pathological researches of this sort, the domain of *indication* is far from being defined, so little indeed, that in determining the indications for the use of a remedy, they might often lead us quite astray, provided we were inclined to close the matter with science thus *brevi manu*. Very many cases are known, and I could adduce, out of my own practice alone, a great many more

than the limits of this work admit of my presenting, in which numerous physicians of this school have decided upon the certain *incurability* of many cases of disease, and expressed themselves thus with one accord, which, nevertheless, were perfectly cured. Even pathological anatomy takes upon itself to decide upon the curability or incurability of pathological exudations, for which it has no right. In the cadaver, many products of disease appear so very extensive that faulty physiological and therapeutical knowledge doubts of their reduction—but the cadaver is not life. Clearly, from the products of disease, especially from those in the cadaver, a rational conclusion regarding a remedy for future cases, can never be drawn; for the product is silent as regards its causes and conditions. Nevertheless, the physiological medicine lives in the conviction, that it can find an indication for a remedy in the products of disease, *e. g.*, to deduce from the presence of an exudation, an anti-inflammatory treatment. *These sources of remedies, peculiar to physiological medicine, are hence false.*

Here we may just mention, that the measure of the *incurability*, which must be looked upon as identical with the character of the greatest danger, (if it were permitted to entertain such notions in science,) is not to be determined merely by the disease or its causes, form and products, but chiefly by the quantity and quality of the parts spared by the morbid cause, that is, the healthy parts of the organism, in relation to the diseased parts, and to the Homœopathic indications.

But what does indicate to us the measure of the complete or incomplete cure? We cannot put this question to the physiological school, for it has no idea of the matter. It would simply answer, a disease is cured when it is no more to be found; when, for example, the intermittent is driven away, when the diarrhœa is checked, etc., and as soon as it happens through the use of antiphlogistics, antipyretics, de-obstruents, diuretics, narcotics, etc., (*hence indirectly*), that no more morbid symptoms shall be perceived; as soon, accordingly, as satisfaction has been given to the causal law, or a transient disease, as for instance, a catarrh has got well of itself. This is all false, and to the last degree irrational, because all these antis can reach neither the cause nor the conditions of the intermittent, the inflammation, etc.

What is the reason, now, that this dominant school should occupy itself with such studies, which direct the attention only to the examination of the *products* of the causes and conditions of the disease?

This merely happens for the reason that it never considers that, in all attempts at a cure, the conditions of the disease should be brought into the calculation; hence, on the ground that it closely clings to the

old maxim, *cessante causa cessat effectus*, and if this does no good,⁴ that it destroys the product itself; and finally, it arises from its inability to rise above its limited circle of thought, to perceive the *whole* of a phenomenon of nature, and to study and observe the *whole* process of nature.

But to this whole belong also *all the circumstances* which *accompany* a disease. If, for example, a patient with intermittent fever, even before his sickness, was always affected by damp weather, he is not cured, even though his last paroxysm occurred years ago, so long as he does not feel quite as well in damp as in dry weather. Or, if a patient, who has been for a long time annoyed by this circumstance, that every draught of air affects him unpleasantly, *he is not cured*, even if, for instance, many years have elapsed since he recovered from his last pneumonia, as long as the disposition to take cold is not removed from him, for every relapse, to which he is exposed under such circumstances, is proof of *the still present conditions* for the same or a similar disease, and hence, a proof that he is not wholly cured.

Such constitutional conditions, which make themselves known by such accompanying circumstances, give us, hence, the only right indication.

§. 58.

It has now been made sufficiently clear that, for a proper choice of a remedy, more is requisite than the analogy and teleology of the physiological school. Here the chief demand is for the formation of correct inferences and conclusions.

But if we maintain, with Virchow, that "that which is not empirical is not logical," then, *a priori*, correct inferences and conclusions are made impossible. The ideas of inflammation, for example, and of anti-phlogosis, are, in the physiological school, certainly empirical enough, and, alas! but too much so; but they are not logical.

Before one seeks and uses remedies, he must have made experiments, in order to draw therefrom inductive conclusions, and hence must know first *what* one should look for, *how* and *where* it is to be sought, *i. e.*, one must possess an *inventive maxim* which may serve as a guide. The rules for this lie in the laws of nature, and of our own knowledge, so that, with them, the discovered facts may be connected. Authority and accident give leading maxims to the physiological school. For three decades, for instance, it still felt obliged to hold on to the law of causality, since it sets up as a maxim that it must seek there for the *causes* of diseases, where the products of diseases show themselves, and these it studied by the help of pathological anatomy

on the *cadaver*, so that it might be able therefrom to found a rational Therapy. These products of disease it found so great and extensive, that only in the fewest cases could a cure be thought of, but it never hit upon the cause of disease and their results. Yet it has never ceased from prosecuting these empirical curative experiments, because that deduction did not, as yet, contain the criterion of a truth.

On the contrary, they have lately reversed this fundamental maxim, and said, that to attain a rational Therapy, one must examine physiologically in the *living* for the abnormalities which present themselves in diseases. But just here, this school found itself annoyed by the fact, that there are, in the organism, no morbid heterogeneous forms at all, but that, for example, (as we have just been speaking of cancer dyscrasia), the cancer-cell at first resembles the recent connective tissue-cells, then the epithelial cells, somewhat later, the granular, fatty cells, and finally goes over into complete connective tissue, which crowds out all the cell-forms of the cancer at one place, in order to see them make their appearance again at another part of the system. But the *causes* of diseases again were not found, and much less any conclusion touching a therapeutic treatment.

These inquiries after these leading maxims and principles have claimed attention during the last twenty-five or thirty years, and have brought forth, it is true, very valuable knowledge in the domain of pathology and physiology, but have entirely missed their aim to find the conditions of disease, in order thereby to procure a guide in the choice of a remedy. Had it been previously considered that the laws of morbid processes must flow from various *external* conditions in connection with the *internal*, of which the diseased forms *made the united result*, it would then have been seen that the problem set before them could not be solved by the investigations pursued upon the dead or living body. But, finally, we will not grieve too much over these blunders, for it has happened as with the alchemists, in their attempt to make gold; although they did not find the philosopher's stone, and could not find it, yet they paved the way for Chemistry and Physics. It was to be shown only that those leading maxims are false, and do not lead to that to which it was hoped they would lead, while, on the other hand, they have laid the foundation for a scientific Physiology and Pathology, but none for Therapeutics.

There was, then, as it seemed, nothing left but the study of Biology and Ætiology, and the results of every *change* of their conditions. The completion of this, however, lies, as yet, in the far-off future, and Therapy, meanwhile, would have to be laid *ad acta*.

This is, in brief, the latest history of developments, and with it, *the present stand-point of the physiological school*, proceeding from *erroneous leading maxims*.

If now we wish to speak of the results of the *change* (?) of those conditions, we must discriminate between them and the consequences of the state *changed* by them. Man is no absolute, independent being, but only a constant form of *changing* substances, remaining during a certain course of time, and, in so far, we may aim to study the *change* of his substances according to biological and ætiological conditions. This never leads, however, to the study of a *change* in its existence, in the form of the organism, consequently, also, to no study of its diseases. For those conditions are, as regards that which is conditioned, the existence of men, already presupposed, and to be considered as given with it. At the same time, however, the conditions are not given which are able to *change* the permanent form of his *changing* substances, and thus make him sick, either in bodily, spiritual, or intellectual respect.

While thus the physiological school, in consequence of its experiments, thinks it may venture to conclude that a natural Therapy is, for the present time, an impossibility; it comes, thereby, in conflict with its *calling*. To fulfill this calling, in some measure, it was determined to depend upon *dietetics* and *prophylaxis*, expecting by each of these to ward off new injurious influences, till the urgent necessity to attempt to use an empirical or traditional, so-called curative agent, should occur. We can only inquire why not do this at first, since, indeed, the scientific value of this treatment is not changed by the greater or less intensity of a disease?

Aside from such inconsequences of the thinking faculty, all these *fallacies* regarding the ways and means to find out a rational *Therapy* by pathological, physiological, biological or ætiological studies, rest upon the fallacy of *not observing* essential circumstances, and here, the circumstance that the laws and influence of a substance, to be used upon the organism, with a curative end, *cannot be obtained by those studies*, but simply and solely from them in connection with laws of that substance itself. For how should the physiological school ever succeed in discovering from biology and ætiology, and *in determining beforehand*, the sum of the phenomena, which must proceed from the connection of the physiological or changed form of the reciprocal action of the organism, with the specific laws of some substance introduced into it from the external world? Neither by the study of the organism and its biological and ætiological conditions alone, nor alone by the chemical and physical properties of a body, can it be

known, what necessarily changed form of its reciprocal action can be produced by the influence of any matter from the external world, within the organism.

Since thus the *leading maxim* of the physiological school for the foundation of a rational Therapy is absurd, up to this day, and hence false, so must the indications to be hoped for from it, in the future, always prove to be negative, though centuries be employed in continued experiments; and among all their assertions regarding Therapy within *their ranks*, the truest is, that a Therapy at present is an *impossibility*, which, with a remarkable love of truth, they confess without disguise.

§. 59.

There is yet a source of impossibility, formally logical, for this school to attain to a Therapy. It plumes itself on its use of the logical instrument of *induction* in its inquiries. But the inductive conclusion can never reach over from one domain of science into another; can never draw a single conclusion from events according to the law of causality, to events according to the law of a reciprocal action. Thus it wishes, for instance, to know the motions of a disease in order to *oppose* it according to the law of causality, *e. g.*, to measure the degree to which the elevation of temperature reaches in fever, in order to destroy the disease by the annihilation of the febrile heat. Its interference by means of the powerful use of cold, consequently, occurs according to the laws of effect or *causality*, and the leading maxim for this interference is derived from the technicism of social life. The febrile heat, however, is a partial phenomenon; one of the manifold fractional phenomena of the *reciprocal action* between the cause of the disease and the organic motions which have thereby suffered a change. It will finally overcome the febrile heat by the continuous application of cold, but the cause of the heat it can never reach with these means, and quite as little can it render harmless the further products of the reciprocal action.

On the contrary, we can *inductively*, and quite properly, draw the conclusion, for instance, that no muscle can subsist without albumen, no bones without phosphate of lime, no brain without fat; these materials must be contained in the food. But if we have a disease of the bones before us, for example, this conclusion can in no wise justify a further conclusion, that a cure is only to be looked for from the exhibition of the phosphate of lime, and quite as little is it permitted

to conclude that, if in any fever there is an undue excretion of uric acid, it must hence be cured by the supply of this acid.

Logical induction characterizes the inductive sciences, which, by it alone, can make progress. To these belong Astronomy, Mineralogy, Botany, Zoology, Chemistry, Physics, Physiology, in short, all which can remain with their conclusions quite at home *in their own domains*. But Pathology and Physiology have to do with reciprocal effects, with the *changed* form of the reciprocal effects of the *organism*, through its connection with the substances of the outer world, and Therapy has, moreover, to learn, and make use of, influences in order to resolve these changes; it must have learned to investigate the effects of *two domains upon each other*, and learn to turn them to its uses; hence *it must pursue its own course*, which cannot be the inductive alone. The physiological school, with its guiding principles and inductions, on the contrary, never can step out from Physiology and Pathology; it remains necessarily confined in these elementary sciences, without ever being able to determine an indication for a remedy for a disease.

Is it any wonder, if, as justly affirmed, this school, on account of its sticking fast in those sciences [Physiology and Pathology], can never acquire a Therapy conformable to natural laws, and never can be a science as regards its Therapy?

§. 60.

The physiological school thus denies the possibility of a rational Therapy, or any Therapy whatever; a Therapy in general for the present and for an unknown period in the future; nevertheless it gives itself, at the sick-bed, the appearance of the greatest rationality, prescribes every day long receipts, and I refrain from characterizing such a course as it deserves. It teaches us, however, to be on our guard, not to be thus led astray also. The therapeutic phantom of physiological, or as it thinks better to style itself, clinical medicine, stands as a warning meteor in the firmament of medical schools. But instead of calling upon a *criticism based upon natural laws*, to separate the true from the false, it still ever blinds the unguarded eyes of the medical majority.

Striving, it is true, against ontological designations and ideas of diseases, it is yet too weak to carry out these good purposes. While it promises that it certainly will do so no more, it falls back again into its radical errors, but it always has the excuse at hand, that the necessity of language compels it thereto. He who thoroughly understands a subject, knows how to express it in the right words, but where this

is not the case, and the corresponding observations are lacking, a word must fill the vacancy, and no manner of speech can well leave behind it a more painful impression, than when scientific discussions, as is the case in these extracts just given, are clad in diplomatic forms, with which most of the declarations are, in the next moment, cast again into doubt.

The physiological school, that much is sure, carries the burden of dogmatic assertions and skeptical opinions, and it cannot absolutely throw these off. Would it overcome them by knowledge, and accept critical results according to the laws of nature, it would long ago have found out, that its maxim according to Virchow, "although the phenomena of life may appear ever so *changed*, yet they are never new *laws*, but always only new *conditions* come to favor," is false in every view.

The results of this, run like a dark thread of evil omen through the whole of their views.

§. 61.

Let us, at present, entirely lose sight of the names with which this school seeks to impress special forms of disease upon the memory, and let us consider the ideas of the most general of their pathological forms, that of fever and inflammation.

Virchow thinks, that we can refer fever to an *increased process of combustion*, without considering necessary the presence of the last product of oxidation or an increased supply of burning oxygen, since, *even to a less quantity of oxygen*, the production of greater chemical transpositions may be assigned. He affirms, "if we hence must consider *heat* as the pathognomonic symptom of fever, and as dependent upon an increased waste of the parts of the body, so must the causes exciting the fever necessarily produce the possibility of a further waste."

Homœopathic provings, however, teach us that *all substances of the external world excite fevers*, as well those which suppress the influx of the oxygen, as those which further the same, hence Virchow's hypothesis is false.

He says further, and in opposition to this hypothesis, "In the degree that the power of the moderating centres is restrained, does the consumption of matter increase, and to the same degree the *peculiar warmth* of the body increases, by which *then the particular point at which the fever begins* is given." The frequency of the pulse, he says, is *no sign* of fever.

His treatment of fever has, "according to what has just been said, a *simple* object, the *cooling*, but this does *not, as such*, remove the fever, since the removal of the heat can only be useful when it destroys the *springs* of abnormal production of heat, and relaxes the tension in the regulatory nervous system." Here belong those remedies which *limit the respiratory process in its operation*, bleeding, neutral salts, vegetable acids, oleaginous remedies. The special fever *remedies* are essentially nervines, Digitalis, Quinine, Arsenic, some vegetable alkaloids, and since the effect of many of them in *lowering the temperature* is established (?) they must hence of course operate especially upon the regulatory centres. To relax the central tensive relation, recourse must be generally had to sudorifics and diuretics, emetics and purgatives."

Who can tell from that what we should do in this fever or that? Who finds here the leading principle which shows us whether we shall operate against the heat, the moderating centres, or the respiratory process? and if we knew that we should do the latter, for example; then the inquiry comes up, according to what rule shall we give the neutral salts, or what salts shall we give, or, in other cases, emetics or purgatives? This doctrine is silent here, and if no other reply is at hand, it is out and out impracticable; for where are the proofs, according to which these remedies limit the operation of the respiratory process, those relax the central tension relations, while the third, are essentially febrifuge? Thus do Virchow's statements give room every where for every doubt and every fancy.

§. 62.

Truly, according to v. Bezold, there exists in the medulla oblongata an *automatic* centre of nerves exciting the heart. The heart receives *motor* fibres which take their course within the sympathetic, and arise in the spinal marrow, and restraining fibres, which run along in the track of the cerebro-spinal vagus.

The origin of rhythm in the heart can be represented, according to v. Bezold, by a scheme, by which we assume that continuous excitements arise in the central nervous apparatus of the heart, which, however, since they constantly meet opposition in the nerves present in the heart, are only *periodical*, *i. e.*, they recover their tone after every overcoming of such an obstacle in the cardiac muscles, and he holds that, supported upon the facts of those exciting cardiac nerves, we can come nearer to the nature of *fever*, by way of experiment.

Had we merely to do with functions, then would this be the right way, but *where and what is the exciter* of fever? here the art of such experiments does not suffice; here the act of observation decides at the sick-bed, by comparing with drug-provings.

§. 63.

What does it finally signify to say that fever can be referred back to an *exalted* process of combustion, *without* considering necessary an *increased* access of the burning oxygen?

Oxygen burns up a part of the organic elements of the body, and thus produces *water* and *carbonic acid*. The greatest part of the latter is neutralized by the bases of the blood. Another part of the oxygen unites itself with the *Sulphur* and *Phosphorus* of the *albuminous bodies* to form *Sulphuric* and *Phosphoric acid*. The insoluble basic phosphate of lime of the bones, changes itself thereby partially into acid *soluble phosphate*, which by means of the bi-carbonated *alkalies* is decomposed in the blood. Hence arise the soluble combinations of bi-carbonate of lime, phosphate of *potash* and *soda*, which go over into the blood and thence into the urine.

This is surely *work* enough to produce the necessary equivalent of heat for the usual bodily temperature. But to this are further to be added the *functions of the hydrogen*. It is just the water and not the oxygen which is the preponderant constituent of the body, which consists of two-thirds of water. It is used for keeping up the physical properties of the body, and renders function and nutrition possible. It is a universal solvent, chemically employed, for dissolving solid substances, and mechanically, as a carrier of the insoluble. Water is lacking in no part of the organism, and it is, in relation to the manifold solid matters, its most universal unit. The whole nutrition consists in the new formation of *hydrates* for supplying the place of that which is dissolved and excreted, and forms, by this alone, an immense *source of heat*; the water of the body absorbs all *kinds of gases*, and thus alone respiration and access of oxygen becomes possible. Every process of combustion is preceded by a polarization of oxygen. Ozone vanishes in the combinations which arise as products of combustion; the antozone remains with the water, to which it has an affinity. The water can also supply the place of acids and bases, and is amphoter [both], and with a mixed food, oxygen is expired, which is followed at the expense of that [oxygen] contained in the carbo-hydrates, while, with the exhaled hydrogen, a small quantity of *per-oxide of hydrogen* is mixed. Water maintains the *equilib*

rium of the normal temperature of the organism; it is the *most powerful heat-regulator* of the organism, while neither the blood nor the nerve centres alone regulate the production of heat. With this old chemical generalization, to seek to explain all motion by the process of combustion, nothing is gained for therapeutics, but to lead the physician into a chimerical anti-phlogosis. Every generalization of that sort is a veritable clog. [Hemmschuh.]

If, to physiological minds, facts represent themselves as clad only in numerous particular properties, they constantly underrate the importance of the *general*, of the gradation of measure and number according to time and space. How shall we sustain to the manifold nature of the progressive and retrogressive changes in the organism, if everything burns up in oxygen?

§. 64.

Let us, hence, seek *material* conditions for fever. Since the warmth of our bodies is a product of export, which originates from the number of physico-chemical operations, therefore these operations on organic matters must act in the ratio of the obstacles which the operation-object opposes to the operation-force. The obstacles, however, act in the ratio of labor expended, the result of which we see in the separation of water, peroxide of hydrogen, carbonic acid and nitrogen. If we see now that nitrogen is excreted in fever as uric acid, and not as urea, then is that the surest proof that the supply of oxygen in fever is decidedly diminished, although, at first, at least, no less oxygen is received. If thus this increased heat cannot arise from increased processes of oxidation, then it must evidently depend upon preponderating *processes of reduction, or de-oxidation*, which set no less heat free than the oxidation processes necessary for physiological life, which is also no slight work.

Now, as concerns the alternation of this increased fever temperature with the chill, this is explained again from the law of physiological life, and here from the law of proportional oscillation, which law is based in the nervous system.

Finally, we cannot, at the present day, speak exactly of oxygen, but either of *neutral* oxygen or *polarized* oxygen, since it distinguishes itself as ozone and antozone; for, with every oxidation and de-oxidation, the chemical polarization of the neutral oxygen takes place, and thus, as never but one of the kinds of electricity can be excited, so, in all cases, where the question is of exciting the inactive oxygen to chemical actions, the positive active oxygen, antozone, and the nega-

tive active, the ozone, must always appear at the same time, so that in healthy organisms, oxidation and de-oxidation always proceed hand in hand, if no morbid cause is present which may disturb this relation.

Although physiology, with its thermometer, can find no such lowering of the temperature, in the cold stage, as the violent chill announces, yet we cannot be justified in asserting, on such grounds, that it [the physiological school] can no longer discriminate the cold stage as one sharply defined. The task of physiology is not to make chemical and physical experiments on the sick, in order to set them up as results of observation and illustrations; its art of observation must begin with the healthy.

To hold fast to an idea, as that of phlogosis, to define fever, is an unpractical demand. Ideas are schemes of the imagination, and explain nothing; they are only subjectively valuable, and the objective law only has validity. Such formations of ideas falsify facts.

Fever is nothing but the physical consequence of the altered division and decomposition of the materials of the organism, which is produced by an external cause. Figuratively, fever is perfectly analogous to storms; it is an alternation of tensions and discharges. Hence the favorite discrimination between simple, torpid, synochal, etc., fevers is fictitious, and has no existence by itself. This distinction does not refer merely to the degree of the change *pre-induced*, but also to its extent, and hence is *not* to be comprehended *by itself*, but as the fever in general, as a result of a new form of reciprocal action, which has entered the organism *with* the disease-making causes. Fever is, under all circumstances, in all times, in all places, the resultant of two or more components, and presents itself with its heat, its frequency of pulse, its chill, its increased frequency of respiration, simultaneously, according to the law of proportional oscillation, with all other morbid phenomena, *which it is wont to accompany periodically*.

Hence the significance of a pathognomonic symptom can never attach to fever, since it is *nothing sui generis*, but only a part of the totality of any specific form of disease. *It is not a general form* under which acute forms of disease can be summed up; it is, indeed, only one of the expressions of their causes; hence, also, it would be absurd to attempt to speak of the treatment of a fever, although a Virchow submits to it.

§. 65.

While Virchow can bring forward no physiological type for the explanation of fever, which indeed would have to be the case if this perception were to be justified by logical consequence, he thinks he has found a physiological analogy for the explanation of inflammation; "it may be a mere disturbance of nutrition, induced by a disturbance of nutritive distribution, but it may be, nevertheless, according to *circumstances*, now rather nervous, now degenerative, now connected with pain, redness, swelling and heat, which depends upon the anatomical arrangement of the parts, and clearly includes no fundamental difference."

"Thus there exists," he argues, "between nutrition and the disturbance of nutrition, *clearly*, no fundamental difference."

But principles belong to the faculty of *judgment*. However, there is a real and a subjective difference. The real cannot consist in a mere affirmation or negation of an idea, but only for the *so and otherwise* of a mediate perception. Indeed, even the difference in the anatomical locality of inflammations is ground for a *discrimination*, and an inflammation in the region of a splinter thrust into the flesh, is, in its manifestations, quite another thing from a spontaneous inflammation of the lungs, although both are alike in the idea.

Moreover, the idea of nutrition cannot be confounded, as Virchow would have it, with that of exudation and absorption. The forming of the exudation occurs in consequence of the operation of a *pathological* cause; no process of digestion precedes the absorption of the exudation; after the absorption of food, follows its change; after that of the exudation, its removal, and so this comparison will become the more untenable the further it is pursued. To trifle with ideas corrupts science.

Our knowledge of inflammation is also a *relative one*. That which is *constant* therein is the mathematical contingency of the individual specific forms of reciprocal action; but the cause, which begets the *changed* form of the reciprocal action of an inflammation, is its *nature*. So many causes, so many individualities and specific forms of inflammation are there, differing from one another, in which many parts of the one case are lacking in the other; here no pain, there no swelling; but yet, inflammation. How is that possible? From the simple fact that pain, swelling, heat, redness indicate pathological precursors, in which, however, there is nothing steadfast, but all of which vary according to time, place and circumstance, and this complex of varieties must be the basis of our diagnosis. If, indeed, there should

be any physiological pattern for any form of disease, there would be a most beautiful one for this. It is the formation of the *area pellucida* in the egg that thus produces swelling, and physically necessitates the formation of the vascular and circulatory system as entirely new local phenomena. While this happens, while the serous membrane rises up from the vascular and mucous layer, it exudes, on the inner side, the liquor amnii, etc. In this, surely, we have the whole idea of inflammation, functionally and nutritively illustrated.

Such analogies, however, do not enter into the relations of form and combination; they are mere results of analytical comparisons. According to *function*, the beginning of inflammation is like an act of nutrition; but the *area pellucida* floats in its own nutritive material, and acquires size in inverse ratio to it; its expansion, its growth, takes place, not contrary to the law of its life, forcibly and unforeseen, but it belongs to its life, just as does the temperature which surrounds it. Within an organ of the complete organism, however, the swelling and exudation of inflammation are not, at the same time, also within their physiological necessary means of nutrition; this must be brought in by vessels already at hand. The whole process of inflammation belongs not to local physiological nutrition, it is even foreign thereto; it is so limited, that it appears at the cost of its surrounding, which does not form the element of its nutrition, and which it compresses and injures. If the pathological form of its appearance has already been given, it announces itself in consequence of its mechanical impression by pain, and by an increased local development of warmth or heat.

Further, there is a difference as regards the combination, since the conditions in the egg lead to the formation and development of the specific form of the human organism; inflammation, however, is a combination of the specific form of the organic reciprocal action in *connection* with its external causes, whereby that change arises in some place, which is called inflammation.

Such analogies as the physiological school loves, hence, give only *relations* of conception. A perception according to analogy, presents, it is true, a perfect similarity between two relations, but between things which *are utterly unlike* as regards cause, time, place and circumstances—perceptions, hence, which, for a Therapy based upon natural laws, must be considered as utterly useless, although they may contain weighty leading principles for other purposes. Had we to do, in Pathology and Therapeutics, merely with this or that opinion, one might put up with all this. But the evil consists in this, that, with such opinions, ontological ideas are connected. One abstracts from such views, ideas which *are taken for the objects themselves*, as if they

really existed, in order thereby to regulate his conduct, and therein lies the deception and the injury.

Under such suppositions, nothing comes more natural than, that, with the idea of *inflammation* one should think at once of *something* that *quenches*, or, of an *antiphlogistic method*, whose chief object should be, as our author himself confesses, to lower the temperature by the abstraction of heat. The result of this, at the sick-bed, we shall learn hereafter. For these very reasons, there is a special medication for this idea as little as for the fever.

§. 66.

The physical reasons of inflammations rest upon the law of attraction. The so-called inflammation, produced by any morbid cause in any part of the human body, — the local attraction of blood produced by the irritation of any morbid cause, takes place through the parenchyma, through the irritated tissue elements, which, increased in their functions, draw constituents from the capillary blood, and this increased demand for material must not only have as results, an increased attraction of blood from the large vessels, but also a stronger current, an accumulation of the same in the vessels present, and the new formations of vessels. Since, finally, a vacuum in the circulatory system is impossible, acceleration of the whole movement of the blood always takes place herewith, consequently an increased frequency of the pulse, and this, indeed, quite independent of the nervous system, or any other hypothesis of paralysis of the blood vessels, etc. These increased functions produce increased warmth, and the continuance of this state is connected with the natural further local result of swelling and exudation, as long as they are not therapeutically removed.

Hence, in Homœopathy, there is neither a specific fever nor a specific inflammation, since all substances, proved on the human body, are capable of producing both fever and inflammation, though each one is different from the other according to the kind of irritation present, the formation of the various organs affected thereby, and a multitude of other qualities of causes and conditions. To present a picture of inflammation in general, even for a single organ, belongs hence to the realms of impossibilities, though of this, physiological medicine has no idea.

Inflammation is, according to quantity, nothing but diosmosis, changed by an external cause and according to various inner conditions; qualitatively, it is a chemical reduction process, the physical

expression of which consists in the fever accompanying it. Of what use now can an "antiphlogosis" be in opposition to a process of reduction?

Fever, says the physiological school, is, moreover, a far *more general* morbid phenomenon than inflammation, and this latter again is *more general* than many others. Almost all works on Special Pathology and Therapeutics, we know, place fever at the head of their teaching, then follow inflammations, etc. Thus the *progressive* course is marked out for the construction of a system. Accordingly, considerations of the *general* must precede those of the *particular*, because the latter must be contained in the former, and it is only the artistic success of the thorough perfection of a deductive science that permits of this progress of the summing up power of judgment. But the investigation of this school, its practice, use, as a matter of fact, only the *inductive* method. It gives itself entirely to the *art of experiment* and neglects the art of observation, *whose instruments are the logical forms of deduction*. It seeks to peer even deeper into the *particular* of its objects, and, the more it experiments, the less is it led to the *general*, to the law of connection; moreover, it does not labor *viribus unitis*, and each one who has, for curiosity's sake, undertaken an experiment for the solution of any question upon which he has stumbled accidentally, never neglects to make his own verse over it, according to his own perceptive capacity, and thus the difficulties of gaining an insight into *connection* infinitely increase. The course, which it has taken in its compendiums of special Pathology and Therapy is, hence, in comparison to the course of its investigations, the *converse*; it is apparently the *deductive* but under the *inductive* method. To do justice to its inquiries, it should have given its results without any system, without any theory; logically, it should at the beginning of endless investigations — endless, because undertaken without any available leading maxim — have proceeded *regressively* and have stepped, from the special, back to the general; a proceeding, however, that would be incompatible with the claims of a science half-way perfect. But just on this account, it would like very much to conduct itself deductively, as do mathematics. In this, however, it will not and cannot succeed, because lines taking two opposite directions can never coincide even in a single point. What happens? It turns idiomatic somersaults, though not one of its devout pupils has ever noticed it, and each one swears, even to-day, that just therein it has spoken the truth. How is that? It confounded the idea of the *general* with the *common*.

Thus fever is nothing that *generally* belongs to diseases, not even to the acute; nothing under which, as parts of a whole, they were to be summed up; it is only a thing common to many diseases; just so with inflammation; there is no inflammation in general, but only forms of disease, the localizations of which may have transiently the symptom of inflammation in *common* with each other.

Huge volumes would not suffice to contain all the comical blunders and self-deceptions, merely of a year of the medical literature of the physiological school. Yet, for our present object, that just given may suffice, offering *one example to enable the reader to find many*.

§. 67.

But really to determine what inflammation is, we must set out from that which produces inflammation. According to Homœopathic drug-provings, every substance of the outer world may produce inflammations of various kinds, and in various places, and, indeed, now with increased and now with diminished excretions, and with various processes within the organism, which are often far distant from the point where the inflammation begins, but none the less standing in an intimate relation of dependence therewith. Even an Allopathist, Dr. Böcker, may be cited, out of respect for the opponents of Homœopathy, and his drug-provings have demonstrated the same thing.

Thus he observed under the use of Belladonna, for instance, that it chiefly increased the excretion of solid matter, of urea, of the vesical mucus, of the fusible salts, and extractive matters, and diminished the uric acid, and infusible salts. Under the use of a couple of drops a day, it delayed the pulse two to three beats in the minute, while at the same time an accelerated, *i. e.*, an increased secretion from the mucous membrane of the organs of deglutition took place. On its continued use, injection and *inflammation* of these parts occurred, but now accompanied with an increase of the pulse, four or five beats in the minute. Thus if the capillaries of one part are filled, the stroke of the heart is correspondingly diminished; but if *inflammation and swelling*, with pain and redness take place, then the number of the beats of the heart is more frequent, and remains also at this height for three or four days, yet without any more Belladonna having been taken. Again, it is a circumstance worthy of observation, that, under this use of Belladonna, in the beginning, and *in small doses*, and for some days thereafter, a manifestly *greater* quantity of carbonic acid was excreted, and, during the use of a *larger* dose, a *less* quantity.

At no time, in no place, and under no circumstances is inflammation thus an object to be considered by itself alone, but only a part of the whole of a pathological process.

Since thus to fevers, as well as to inflammations, only the significance of separate symptoms in *company* with various diseased processes attaches, since they are always wont to occur as *parts* of an entire form, so, as already said, it would contain a contradiction in itself to speak of a special treatment of fever or of inflammation. Hence we will adduce but a single example to show what *forms of judgment*, the physiological school is nevertheless wont to use, in order to speak of the treatment of inflammation, and how it seeks to make this possible by ideas of reflection, leaving the inductive method of experiment entirely out of view.

Virchow lays down in his Text-Book upon the treatment of fever and inflammation, among other things, the following indications: "Narcotic remedies follow closely upon general blood-letting. Even they *scarcely* produce a direct change in the condition of the centre of inflammation, but *either* work palliatively (symptomatically) *or* preparatively." (That is now putting palliative on a par with symptomatic. There are no palliative cures; *palliation* is only help for a moment, without duration, and seeks to remove, if for a moment only, a prominent symptom temporarily hindering the cure, as, for instance, by emetics or laxatives to remove remaining and injuriously acting substances, etc. The symptomatic, the doctrine of the signs of disease, however, relates to the *entire form* of the disease, to the so-called *essential* indication.) But to proceed. "*In the first rank of preparatory remedies, we find Digitalis, the extended use of which has been brought into fashion by Schönlein; it operates chiefly as a febrifuge, and, indeed, sometimes produces the general relaxation, if the local inflammatory process still progresses. Its retarding effect upon the heart is, however, surely not to be slightly rated, even for the local relaxation. Next to Digitalis, Aconite may partially find a place; Opium, Hyoscyamus, Aq. Laur., and others are to be used more symptomatically for the removal of nervous phenomena, and especially to be used with asthenic inflammations, yet we do not like to use these remedies in the beginning of inflammations, except when the general disturbances very early take on the paralytic character; on the other hand, they are of all the greater significance for the final reparation, since they remove many phenomena of irritation, which might again give new ground for disturbance, as, for instance, vomiting, cough.*"

I have only taken the liberty to mark the qualifying phrases, numerous out of all proportion for so short a passage, in order to let the reader form his own opinion of its practical worth.

§. 68.

In Canstatt's Jahresbericht, the work entitled "The Fundamental Laws of Physiology, Pathology and Homœopathic Therapeutics," was not criticised, because it displayed too rich an imagination.

But can there be more imagination than is shown in this short extract? With it we have, it is true, arrived at a point where the question no longer concerns mere ideas, but correct deductions. If I have already shown that the notions of the physiological school, in reference to fever and inflammation, are false, it only yet remains to add that Homœopathy recognizes no such notions, that it never considers any forms of disease as products, but as parts, whose whole is to be taken into view, if one would establish a diagnosis of diseases, and still more, a prognosis thereof. Two forms of deduction, essentially different, comprise the sum and substance of diagnosis and prognosis; to the physiological school, these are strangers. *Diagnosis* is a perceptive knowledge, and rests upon the art of experiment and the art of observation. But it has never yet occurred to any one, seriously to reflect what requisition is made upon the physician when a correct prognosis is demanded of him. Had this been the fact, it must long ago have been perceived, that the Therapy of physiological medicine is not in a condition to prognosticate, even though, prior to this, it had become *a science based upon natural laws*; for *prognosis* indicates a kind of knowledge which permits us to know the termination of future events, without any previous observation thereof; prognosis is thus a knowledge acquired by reasoning, *a priori*. All diagnosis is useless, and no indication is possible, if I am not capable of knowing, *a priori*, that, in any diagnosticated case, *after the use of any drug it must so occur*, as I maintain, even before any expected events have happened, and before I have observed them; and although the school bases the prognosis merely upon the course of the disease from its cause, and upon the danger possibly therewith connected, yet is this basis always false, as soon as a therapeutic act has taken or shall take place, for now, in this direction, also, we must be able to prognosticate. The opinion, *a priori*, refers to future things; the opinion, *a posteriori*, to present and past perceptions. Hence we must possess another source of knowledge, besides that merely of perceptions, and this source can be no other than the necessary laws of

nature. Hence, it follows, that even *Therapy*, be it otherwise called by what name it may, must be based upon natural laws.

§. 69.

Of no less significance are the forms of deduction necessary to the establishment of a diagnosis; for it is only from the diagnosis and prognosis that the *indication* results.

In regard to the objects of *Therapy*, those things which point to a cure are called *indications*. In the physiological school, according to Wunderlich, we have, of these, the following:

“1. The *indicatio causalis*, the end of which is to destroy or remove the causes of disease, or to moderate their power.

2. The *indicatio essentialis*, which takes hold of the essential process in a case of disease, under the supposition that all other disturbances depend on that and stand or fall with it.

3. The *indicatio symptomatica*, which seeks to remove or destroy single distressing symptoms only, to anticipate intercurrent events or accidents [in the disease], and to avert dangers from secondary affections. The pursuance of this latter indication may lead to the *finest* *Therapy*, as well as to the grossest routinism. It finds, however, *its full justification* in this, that, in the majority of cases, ailments and dangers depend more upon secondary and tertiary disturbances, than upon the *essential* process. It is permitted and even demanded to have recourse to this. 1st. In diseases which get well, when left to themselves. 2nd. In case of annoying or exhausting phenomena. 3rd. Where a symptom, only loosely connected with the main disease, hinders the cure, or prevents the use of an appropriate remedy. 4th. In case of dangerous secondary disturbances, where life is threatened (*indicatio vitalis*). 5th. In all *incurable* diseases. 6th. In cases where one is not sure of his diagnosis, and where often only a prudent sounding, by means of a symptomatic curative treatment, is possible and permitted.”

Since the physiological school is directed in its doing and leaving undone only by the law of effect, and not by the law of reciprocal action, it is left to follow such vague indications.

Since the nature, the essential of a disease lies in the sum of its causes and conditions, and hence comprises the outer as well as the inner conditions, so there can be *no indicatio causalis* in the sense of the physiological school. One expresses himself falsely, in using the common phrase, a dagger has caused this or that wound. The dagger was not the only cause, but *one* of the conditions, as also

another condition thereto was a body which could be wounded. If I draw the dagger from the wound, I have met a *conditio causalis*, but no *curative indication*. In the fundamental maxim, *cessante causa cessat effectus*, there hence lies a very common therapeutical fallacy, according to which the duration of the effect is dependent upon duration of the cause; that is sometimes, but not always the case. This fallacy is only to be avoided by always remembering that, as a rule, every cause is composed of many conditions, of which each one may produce different effects. It is false to maintain, for example, that, by producing a violent perspiration, the cause of the cold is removed. This cause already belongs to the past, and we may experience every day, that such attempts leave us in the lurch, or have only afforded momentary relief, while the introduced diseased process rages still, or returns in another form. To oppose the atmospheric or telluric, in short, the ætiological conditions, the physiological school feels itself confessedly powerless; they are, for it, *un fait accompli*, beyond their reach.

That physiological medicine can only dream of causal cures is natural, because this is the readiest method to every superficial mind, for it would simply put the fire out, bring the drowning man into the air, establish quarantines against epidemics, provide antidotes for poison, etc., all of which, under the circumstances, may be very praiseworthy, but it thinks that, with this, it has done *all which is possible*.

But that a Homœopath, at this day, should still find his El Dorado in such a cure, and so far misunderstand his great object as to wish to show that he pays no regard to constitutional conditions, which, under all relations, are as necessary to the possibility of any sickness, as the causes of disease introduced from without; this is unhappily new, because just the regard to the kind of *conditions of the disease* which is foreign to physiological medicine is peculiar to homœopathic.

The Editor of the Zeitschrift für homöopathische Klinik, is certainly not at all particular about what he sets before his readers, and thus we find therein (September 1st, 1864) the assertion, as one being clear enough by itself: "While the cause of the disease is still efficient, the patient exposed to this cause cannot be permanently cured." As a confirmation of this proposition, the "well-known" fact is adduced that in fever and ague districts, during the malaria, in spite of all use of the specific (?) quinine, frequent intermittent cachexias occur, which can be cured only (?) by removing the patient from the sickly neighborhood, *i. e.*, by a causal cure.

These are clearly assertions of physicians of as yet not much experience, but one may read them if he wishes to waste time. In the

first place quinine is a specific *only* for *certain* forms of intermittents, sharply defined by Homœopathy; secondly, we cannot send all our patients out from their unhealthy districts, unless we have the money to give them, needful to carry out this advice; thirdly, they can, declining this advice, remain and be cured, while they live in marshy districts, not only by me, but by many other Homœopathists, since we know how to remove, homœopathically, the *constitutional conditions* to the formation of an intermittent; in the fourth place, it must be acknowledged, that, not only *in spite of*, but in *consequence* of the inappropriate use of quinine, the so-called intermittent cachexy — which is really a quinine cachexy — arises.

This is not the place to speak of these *constitutional conditions* for the possibility of a disease, in contrast with the *causes of disease*; this will be done subsequently, while here we treat the subject promiscuously, to mark out the error.

There are, however, permanent causes, full of danger; those, for instance, established by an apoplectic centre. The indications for the cure of such a case, however, naturally coincide with the essential indications, and here again are not at all causal.

The *indicatio symptomatica* is thrown, by the physiological school, into one heap with *palliation* and *prophylaxis*, but by a misunderstanding; for *a disease without symptoms would be a non-entity*. The *essential* indication and the *symptomatic* are of like significance, because the former must refer to the symptoms of *all* conditions of disease. The difference lies only in this, that the *indicatio symptomatica* announces why chiefly a remedy is to be given, while the *essential*, on the contrary, shows *what* remedy is indicated. The two are as inseparable as cause and consequence, and all these, hence, form together but *one*, the *only possible curative indication*. Not till I know what lies before me, and what may thence arise, what the complex of symptoms expresses, whether physical or chemical, and, in short, all this is brought to light by the art of experiment and observation, can it be determined what is to be done under the circumstances. Hence, all the subdivisions of the Professor, under the title of *indicatio symptomatica*, belong to palliation and prophylaxis, the *indicatio vitalis* excepted, which again forms no indication by itself, but is always a part of the *essential* indication.

§. 70.

But even these mistaken classifications spring from the impossibility for the physiological school to rise above the causal law. In consequence of this law of effect, which comprises all the aid which this

school, notwithstanding its physiological types, can offer, it is always ready to begin an exterminating strife *against* everything which appears to it *abnormal*. Unconscious of having to do with *two-fold* conditions in diseases, which form the united result of two existences, it ever attacks the organism and its parts, according to the presenting symptoms, the results of those reciprocal actions, as if, with the results, the causes and conditions could be annihilated. As long as this unhappy idea of combating continues to prevail, a rational Therapy, even on this ground, is not to be thought of, even if we had learned to understand all objective reasons for the disease. What good can it do, for instance, to strive against the water on the brain, in hydrocephalus, and to seek in every possible way to remove it, while it just fulfills the condition of the continuance of life? What can it avail in fever and inflammation, to lower the temperature at any price, the very temperature which, being the result of internal processes, presents to us a means for its relief? And so it goes with all the indications of this school.

But, in therapeutics, our object is never to engage in a struggle *with* disease; this would necessarily produce a partial result to the injury of other parts even; on the contrary, our object is to *satisfy the necessities of the organism* which it requires by reason of the disease. To perceive these necessities the symptoms are specially necessary, by which is expressed what is going on, and he who seeks to blot out these symptoms partially, not only does a manifest injury, but deprives *himself* of the most valuable material for his observation and his indications; he thus confuses his diagnosis, his insight into the course of the disease, and throws away the means of proving the *correctness of his observation*. This precipitate officiousness is a sad mark of the Therapy of this school. To adduce only one example of a most palpable kind, I select ulcers. All ulcers, arising from the most varied causes, it plasters and anoints, by which they must lose the character of their surfaces, which alone may announce what is the condition of the cause still working in the organism.

§. 71.

In these few previous lines, so many confusions and fallacies which adhere to the physiological school present themselves, that, in order to proceed further, it is first necessary to draw the attention, by examples, to the instruments of the art of observation, with which no physician can dispense at the bed-side, though these are taught in no

clinic: here, for the time, the art of experiment is adopted as the *primum movens* of the teaching.

"There is no art which is so difficult as the art of observation," says Liebig, in the fourth edition of his *Chemical Letters*, Vol. I, page 34, but in order to make this clear, he adds thereto a literal *extract* from the inductive logic of Mr. Arthur Mill, as it is found in the translation by Dr. Schiel, 1849, page 86, where he uses language similar to that of Liebig, and thus proceeds: "for he is not the observer *who sees the thing before his very eyes, but he who sees of what parts the thing consists, and in what connection the parts stand with the whole.* Many overlook the half from inattention, another tells more than he sees, confusing it with what he imagines; another sees the parts of the whole, but he throws parts together which should be separate."

As an example of this proposition of Mill, Liebig adds: "In the Görlitz trial, in Darmstadt, the women who washed and dressed the corpse, saw neither arm nor head on the body; another witness saw an arm and a head as big as his fist; a third (a physician) saw both arms and a head, just about the usual size of a woman's head. From these expressions, it is easy to recognize the degree of culture of the witnesses, their capacity for observing."

Mill and Liebig here confound the *art of observation* with the *mediate perceptions of the external senses*. The faculty to make perceptions every child possesses, more or less, as well as many adults, and it is no *art*. To the art of observation belong continuance of perceptions and, at the same time, synthetic comparisons of the same with each other. From this art, that knowledge arises which is termed experience.

Observations and experiences must be made of events which we *cannot see through the medium* of the senses; hence the idea of the art of observation comprises, in itself, the *accurate* sensible perception as presupposed; but the art to discover the connection of sensible perceptions accurately comprehended, by means of synthetic comparisons and all the logical instruments essential thereto, and to form the correct judgment thereupon, *that is the art of observation*; this art children do not possess, and, as it seems, not even every learned man; but truly, it is the most difficult which man can acquire.

Hence, that example from the Görlitz trial, which Liebig thinks he may use as demonstrating the lack of the art of observation, is impertinent; for, if the opinion of the physician, as an expert, is taken, as it is here, to be sufficient for the overthrow of the other witnesses, the example contains, at least, nothing but *errors* of the mediate perception of the *external senses*, and such errors clearly have nothing to do

with the definition and the *illustrative* demonstration of the art of observation.

Neither is Mill just the one who may truly set forth the laws of induction, for he himself asks, page 32, "Why in many cases is a *single example* sufficient for a *complete induction*, while in others, *myriads of agreeing cases*, without a known or supposed exception, make so *little advance* towards the establishment of a fact?"

"He who can answer this question," says Mill, "understands more of the philosophy of logic, than the wisest of the ancients; he would have solved the *great problem of induction*."

One should, therefore, not *copy* him verbatim without quoting him!

But we were so happy as to possess this wisest of the wise of antiquity, in Prof. Apelt, in Jena, up to the year 1859, during which year, unhappily, he died.

His theory of induction, published in the year 1854, in Leipzig, by William Engelmann, is unsurpassable, as are all his philosophical works. His immense discoveries in the domain of thought will crown him with immortality.

That question now of Mill is thus answered, that the first case, which he calls a complete induction, is an abstraction, and not remotely an induction; that the other myriads of cases can only lead to an induction according to the rule of addition; for an induction requires many cases, but abstraction only one.

Observations by the senses, the making of perceptions, requires just as much practice as the art of observation, which must be preceded by these exercises.

The entomologist sees, at a distance, a caterpillar hidden under the leaves and twigs, while an unpracticed one does not think it present, because he lacks the exercised, or, so-called, practical sight. It is just the same, at the bed-side, as regards differential diagnosis, and still more clearly is shown the necessity of practical exercise as regards indication.

What was called the luck of the physician, or his tact, is really his *knowledge from memory*. At first glance he knows what one unpracticed seeks to unriddle by the use of all technical means. But not only that, he knows not only, by practice, the necessary indications of his remedies, but also the effects of those which he remembers to have used in like cases, since the *forms of the reciprocal* action, in which the remedy was wont to engage with the organism, when used in these previous cases, became known to him and still remain so. He does not know this in consequence of an expectation of similar cases *from habit*, or from statistical enumeration, but, from remem-

bering *an objective law*, in remembrance of the observed forms of reciprocal actions, in their constant *course*, produced by his remedies, hence by the connection of *previous* facts, which come under these laws, with the later forms which follow.

Hence the recollection of favorable results pertains not to empiricism, but to *rational treatment*, and only ignorance of the art of observation could lead that author to the error of considering these forms of judgment empirical.

This has its natural reason in the method of teaching of this school, which surely can teach nothing of such distinctions. The clinique is used, at present, mostly for diagnostic and experimental *technics*.

But medical art and science can never prosper except by the technics of experiment *in connection with the technics of the intellect*, and, as is well known, practice underlies all technics, if we mean not to lose them. What the technics of experiment has disclosed, possesses no *more* value than the accident itself; it presents merely accidentally acquired facts, which are undecided, till the technics of the intellect can connect them, dependently with those laws of nature, under which alone they are possible.

Then, however, they have become the imperishable property of human society and need no diplomatic language, into which the technics of the dominant schools is wont, perforce, to indulge.

The rules and technicisms of experiment, of chemical or physical, physiological, pathological, microscopical, technic-diagnostic, surgical or obstetric operative, in short, all requisite *arts of experiment*, all this, is *very easily acquired* by that dexterity, of which every physician must be conscious, before he undertakes the study of his calling. It is otherwise with the hereto indispensable *art of observation*, the general lack of which has brought the reproach upon these branches of science. that they are only of to-day, since to-morrow even may show the falsity of the conclusions, drawn from an experiment. This clearly cannot lie in the thing, but only in us. In fact, the instruments of the art of observation are to be found neither in the laboratory, nor at the bed-side, *for each one must bring them with himself*.

§. 72.

The assertion, for example, that Caffeine and Theobromine, substances the richest in nitrogen, are *not poisonous*, but are even the most precious articles of food, belongs to modern times. But it is an older, and still daily experience, that the use of strong coffee is fol-

lowed by marked weakness, trembling of the limbs, with violent and irregular palpitations of the heart, etc., and the latter may, according to the teachings of auscultation and percussion, indicate a complete and far-advanced aneurism of the left ventricle, with insufficiency of the aortic valves. These accidents increase to confusion of the senses, visions and delirium, with constant inclination to urinate. Since all these changes in physiological functions arise from Caffeine, it is hence, as we may say in opposition to the above assertion, a *poison*.

Now, on which side lies the truth? To learn this we must first inquire what idea is contained in the term "Poison," used by both parties.

There are but two kinds of general conceptions; the problematical conception is the *idea*; the apodictic [demonstrative] is the law. The first has only *subjective* validity; the latter only *objective*, and each by itself alone is *void*, and only in their relation to each other do they attain the general validity of truth.

The idea "Poison" is, for the time, a subjective idea, thus void; hence the question is as to its law. The law of specific reciprocal action is one condition of the self-maintenance of the organism; the reception of nutritive and functional means from the outer world, the other. Hence, that which is once known according to its *quality* as nutritive, cannot, at the same time, be a poison, in which the idea of hurtfulness inheres. Hence this idea of poison must be explained by the *quantity* of the substance, which is designated as poison, and that, in *relation* to the laws of the self-maintenance of the organism. In this relation, it is seen truly, that all nutrient and functional means may produce even injurious, *i. e.*, poisonous effects. Poison is thus a *relative idea*, just as remedy is, and food; for every power of a body consists causally or essentially in this, that it strives to change the condition of some other, according as a *relation* between the two exists. Hence, neither *quality* by itself nor *quantity* by itself, decides the question, whether any substance from the external world operates as food, or as a remedy, or as a cause of disease, *i. e.*, a poison; but this is decided only by its quantity and quality in the *relations* to the physiological and pathological form of the reciprocal action of an organism. Hence, according to the qualitative form of judgment, both may be right, he who affirms that coffee is a poison, as well as he who denies it this property; but, in this, both think no further than their noses reach.

But if we wish to form a judgment for ourselves, we must, as has been said, first compare the given ideas with all forms of judgment, according to *quality*, *quantity*, *relation* and *modality*.

Wine may also, like Caffeine, according to its *modality*, be at one time a poison, at another a food, and at another a remedy. In the same *quality*, the same *quantity* of wine in its *relation* to the organism of a diabetic patient, may serve as a precious remedy, while, in relation to another organism, it appears so much a poison that it may strike it down in an attack of apoplexy. Poison is, hence, a relative, and not at all a scientific idea; *it signifies only the injurious quantity of a given quality*. This is the whole pith of the simple strife about poison and no poison.

He who has not yet attained a proper understanding of such ideas, must refrain from speaking of Therapeutics.

Moreover, I wished to prove by *this* example, that the art of observation, above everything else, rests upon the *instruments* of the logical *forms of judgment*. And, if the indispensableness of forms of judgment according to quality, quantity, relation and modality is undeniable, I must here draw attention chiefly to the indispensableness of *modality*, since the experiment by auscultation and percussion might diagnose hypertrophy of the heart, with valvular insufficiency; although nothing of the kind were *really* present. Civil and military surgeons may every year convince themselves of this. Functional disturbances of the heart, intentionally produced, by the use of coffee, perfectly simulate the above mentioned affections of the heart. But if we subject young people to medical observation, under the privation of coffee, the whole disturbance disappears in a short time of itself.

Hence it is clear, *that the experiment alone never forms the decisive instance*, but always leaves open the question of *being or not being*, *possibility* or *contingency*, while the other forms of judgment give the decision.

Thus one authority cries out, *Me hercle, opium sedat!* the other, *Me hercle, opium excitat!* or Rhubarb is held to be a laxative by one, while another says, no, it constipates. However, both may be right and both wrong. Laxans, obstruens, excitans, sedans, poison, remedy, food, are merely *relative ideas*, taking their rise from the arbitrariness of the power of judging and have, *in themselves*, no *scientific value*.

§. 73.

The usage of language, which has a double form for almost every proposition, breeds the greatest mischief. The three forms of propositions — *in*, *by*, *with* — indicate the categorical, hypothetical, and divisive form of proposition. But there is certainly a great difference

between the mere *thinking* and the *perception* in thinking; between the analytical and synthetical *comparison* and deduction.

The deduction must have a subject, and a connection with a predicate. *Comparison* takes place between two subjects or two predicates. Now, when I say, the difference between health and sickness lies not in its object, it is the same process, it must be pathologically and physiologically the same, I express no deduction, but only a comparison by which my knowledge is not at all extended, but only confused; there is given only a subjective difference of an individual kind of perception, a dogma. We make, for instance, at one time synthetical, at another, analytical comparisons, which latter refer only to characteristics already known, which belong to two objects as such; while the synthetical comparison flows from characteristics which do not belong to the objects as such. Gold and silver compared with each other give merely analytical ideas. But if I know the specific effects of gold in connection with the organism, and that of silver, then I compare the effects of both synthetically upon the basis of the law of specification. §. 27, etc.

But every science may be discriminated from others objectively also. As plants are the object of Botany, and minerals that of Mineralogy, so is the object of Physiology, the relative healthy, *i. e.*, oscillating life; that of Pathology the diseased. If we were only to engage, in the natural sciences, in analytical comparisons, then we might also say, for example, there is a botanical mineralogy, and a mineralogical botany, if we could identify the living plants with the petrified flora. Logically, in the domain of perception, from mere conceptions, it is possible, but really, not. For the physiology of plants, important knowledge may be obtained from the petrified flora; but, for its pathology, this is impossible. *Logically*, in a categorical deduction, every characteristic may be set forth as a subject; but *really* the subject is always that which exists by itself, and the predicate is its property. All analytical deductions and comparisons are logically correct, being based upon the proposition of contradiction; the real are only the synthetical.

One may allow himself to be beguiled into the thought that in this I am touching upon the unessential. No, the difference between this analytical and synthetical comparison is so important for physiology, pathology and therapy, that just this very mysterious neglect of it furnishes the chief cause for the modern boundless confusion in the physiological school. Hence, when I express deductions or comparisons, which already lie in the idea of the subject, then I merely dismember, I analyze. In the idea of sickness already lies that of

disturbance, that of the "character of danger," of fever, of pain; in short, the modality of all symptoms lies there; they contain only parts of the conception of the subject "disease" dismembered, be they ever so many, and my knowledge gains thereby, at the most empirical, but no rational, extension.

It is different with synthetical comparisons. When I say, disease is a *change* of the physiological state of the specific form of a whole of the individual reciprocal action, in consequence of an external *cause*, I have not dismembered the idea of disease into its phenomena, and the characteristics which might be counted as constituting this idea; but I have, with the idea of the subject, connected a new one, that of the cause, and added a new predicate, diametrically opposed to the specific form of the organism, that of change, and hence extended the idea of the disease synthetically, and even established it according to natural laws by its subjection under the causal law.

The grandest dialectic errors and delusions, from overlooking this Janus-face of *categorical* deduction and comparison, pervade whole volumes of the medical literature of the physiological school.

But this school fares no better as regards the *hypothetical* form of deduction, from lack of observation of the difference between reason, cause and condition. A reason is either a reason of perception (*ratio cognoscendi*) of a logical, or, a reason of being (*ratio essendi*) of a real connection of things. When I say, in the sense of the physiological school, Pathology must disappear in Physiology, for the diseased life is nothing else than the healthy, because it has its physiological types, that is a *subjective reason of perception*, an *analytical comparison* which is by no means justified in combining the two subjective ideas of Pathology and Physiology otherwise, *i. e.*, really in one unity. One may, at the best, confess that such irregular views are possible to a luxurious fancy. But, in inquiries into natural sciences, we can use no fancies, no fiction, we must simply inquire after the reason of being, and be able to bring it into connection with a law of nature; there is nothing more to be done. The cause of being of the diseased life, however, is the external disease-producing cause which changes the healthy life in its function and nutrition, and, *only to perceive* that, the analytical comparison with the so-called physiological types suffices.

Finally, the reason of being is that which also divides itself into *cause* and *condition*, of which we have already spoken largely. When the art of observation is not even so far cultivated that such striking differences are confounded together, and hence lost, then fire (flame)

and water may be identified with each other, because both contain oxygen and hydrogen.

§. 74.

Even with the judgment that distinguishes between the *whole* and its *parts*, there must be a two-fold discrimination, because a *real* whole may consist, either of a mere chemical, physical, or other combination, or of the organic reciprocal action of its parts. The *logical* whole consists of its *schema*, whatever it be, of its *circumference*, mostly contingent, its *sphere*, its *domain*. It is true, the inductive sciences are logically comprehended as a whole, but, for example, in the whole of zoölogy, every part forms again a whole of reciprocal action, according to the law of its specification.

The physiological school, indeed, takes the organism as a *complete unit*, now anatomically, according to the *composition* of its parts, now physiologically, as simple reciprocal action of its parts among themselves, but without ever strictly holding fast to one of these distinctions.

But the organism is never a complete whole, not for the least moment of time, according to the law of proportional oscillation. As long as this mighty all-embracing motion remains excluded from the observations and reckonings of Physiology and Pathology, so long are these inexact; so, indeed, that the one thinks he has discovered a *result*, though the other may deny it on the ground of the very same experiment.

"In all times," declares Mill, very pointedly, "men have inclined to conclude that when there is a *name*, there must be a special distinguishable entity corresponding thereto; every complex idea which the mind formed for itself, out of its ideas of individual things, was looked upon as if it possessed a corresponding external objective reality." This lamentable personification of forms of disease, led to the greatest errors in diagnosis of the physiological school, and puts an end to any intelligent discussion: for every adherent of this school thinks that, by adhering to those ideas, arbitrarily formed, he can read what takes place in the patient.

Hence, according to the laws of nature, diseases are *nameless*; each one, it is true, can be specified by ideas, but, in general, only arranged in a *schema*. Admitting the latter, *i. e.*, denouncing on one side, the ontologies in use, this school cannot avoid arranging the disease, at least, anatomically, according to tissues and manifold localizations. This contradiction would cease, if they would ascribe value to these divisions only as forms.

But as soon as this school begins to speak of forms of *reciprocal action*, it is exposed again to the danger of being unintelligible. Thus, for example, in this respect it divides forms of diseases into acute and chronic, but no pathologist or therapist has as yet succeeded in defining where the acute forms cease and the chronic begin; the cause of this lies in their vague knowledge of the subject. But, according to the law of proportional oscillations, all *acute* diseases must end with the 35th day, and whatever goes beyond this, or relapses in greater intervals, belongs to the *chronic* forms.

All the unmentionable strivings and self-sacrificing efforts of the physiological school, in the analytical comparison of the pathological processes with the physiological, in the hope thereby, at some future time, to discover the laws of the former and then, from these, those of Therapy, must, from these very reasons, be without result, even from the first.

Positive results and experiments upon the so-called physiological organism, amid the uninterrupted change of its functions and transformations, (which take place according to that law of proportional oscillations,) can be gained only when the influence of *this* law is considered, on every side, according to the method of the change of conditions, and the experiments themselves are carried on, and that uninterruptedly, at least for 35 days.

§. 75.

To the *art of observation* belong also the conclusions from *the effect to the cause*. These we obtain by the rules of the logical instruments, *Induction*, *Abstraction* and *Deduction*. Even with these, such an inconceivable abuse is practiced, that, to an ignorant one, X may easily be offered for U.

A notice, which I take from Virchow's Archives, contains as a leading idea, an attempt to attain, by experiment and observation, a statistical synopsis of the history of the growth of the body of an animal. The whole result was about as follows: The ovum of the badger dog has a diameter of from $\frac{1}{13}$ to $\frac{1}{12}$ of a French line, and is to be considered, in proportion to the animal when born, as an infinitely small body. A badger dog, born May 5th, weighed 230,62 grammes, after having been 63 days in its mother's womb, and being then two hours old. A similar dog, of the same breed, and born at the same time, weighed, after 25 hours, 237,67 grammes. A like dog, born at the same hour, weighed, after it was 76 days old, having taken food mean time, 3178,72 grammes. Its mean daily gain was

38,80 grammes. A fourth hound, born and nourished as the former, weighed, after 113 days, 4788,55 grammes, and its mean daily increase was 40,63 grammes, etc. These observations form the major proposition. From this the following minor propositions were drawn.

From the inconsiderable weight of its ovum to its birth, the animal had attained 230,62 grammes. But since nothing grows from itself, but only by appropriations from without, this phenomenon shows that the ovum must have received nourishment from without, hence, from the mother's womb. That the animal also increased in weight, on receiving proper nourishment, shows that this increase, also, can only come by means of the food received. Hence, finally, the following conclusions: when, from the supply of food, the animal body develops itself, increases in weight and grows, it is in consequence of this reception of food. The experimenter, however, comes to a much wider conclusion, from his highly interesting experiments, since he believes that he has thus succeeded in establishing the definition of food, and says: "Food is, thus, every substance which, by reason of the nature of its molecules, and of its molecular forces, is adapted, under certain conditions, to the formation, progress and renovation of the organism." This is manifestly inferring too much, for, in his experiments, nothing appeared relative to the nature of molecules and the molecular forces of the food, and nothing of the particular conditions for the formation, progress and restoration of the organism.

Here I must again call attention to the hereditary errors of experimenters: to these, for instance, that they, by reason of their ignorance of the art of observing, *always conclude more or less* than their experiments have demonstrated. Although this experimenter had laid, not only the whole animal, but also each separate organ, upon the scales, every time, and calculated the per cent. differences and proportions, etc., according to the various ages of the animals, yet he had no right to speak of molecules and molecular forces, otherwise than by subordination of facts to the laws of molecular forces, concerning which nothing appeared.

Moreover, to be able to speak of determinate conditions under which the nutritive substances become adapted to the growth and restoration of the organism, he should not found his opinion upon the experiment on young animals alone; he should rather have taken into his calculation, besides the productive, the declining years also, and then those of decrepitude, before he could advance to the establishment of a definition of food, as he said, from the stand-point of the most rigorous science. The whole experiment is not carried out scientifically at all; the inferences are false, and even the kind of experiment was not half sufficient

for the solution of the problem. Hence, we have gained no proof, no definition, but a subjective criterion. In the meantime, he leaves, unconsidered, an important indication. Thus, he makes prominent the fact, obtained by his experiment, that the brain of the new-born dog is from 3 to 4 per cent. of the whole mass of the body, while the brain of an older dog is but 2 per cent., and that of a still older dog but $1\frac{1}{2}$ per cent. of the gross amount; that, further, the fat of the new-born dog is from 21 to 22 per cent. of the whole, and that the fat of older dogs now increases and now decreases in per cent., just as, in consequence of the particular kind of food, more or less fat is deposited under the skin, while, in two dogs, the fat amounted to 25 per cent. of the whole, though these very dogs consumed a *larger proportion of vegetable food* than any other. Surely, these are results which considerably promote science, and from which new inductions may be formed, but inductions very different from those which were formed by the experimenter, but which may go to confirm the views already advanced in previous paragraphs upon the significance of the connective tissues, of the cells and of fat. What can the art of experiment do, if it does not go hand in hand with the art of observation?

Let us not neglect to select here a practical example out of Therapeutics itself, to show expressly how utterly indispensable, to none more than to physicians at the sick bed, are the instruments of logic; not understood by them, however, and falsely brought into use.

In Vol. I., of Prager Vierteljahrschrift, 1864, Dr. Poor, of Pesth, gives the *Ætiology and Therapeutics of tetter* [Flechte].

He had found that, in Pesth, every tetter patient had a swelling of the liver, and, more than this, a swelling of the spleen. The swelling of the spleen, he found at the beginning, during the progress, and at the acme of every case of Herpes, Eczema, Lichen, Prurigo, Pityriasis and Psoriasis. "Hence, I must either think," he proceeds, "that, in Hungary, every man has an enlarged spleen, which would be nonsense, or, that the swelling of the spleen was no accidental complication of the tetter; but that it, and the eruption of the skin, form two mutually connected phenomena of one and the same disease; else it were incomprehensible why, among 459 tetter patients, there should not have been even a majority without affection of the spleen."

Further, he proceeds thus: "In investigating the cause of the tetter, I followed, hitherto, the synthetic method, as I endeavored, in the way of *logical induction*, to raise myself from the data of experience to a universal [general] truth. In 459 cases observed, the tetter showed themselves 455 times, together with swelling of the spleen, intestinal catarrh and periodic attacks; from nearly the entire sum of these

numerous cases, I might, also, with *almost* perfect certainty, *conclude* that the tetter appeared in *every* case in connection with tumor of the spleen, intestinal catarrh, and periodical attacks of fever. When two similar subjects (diseases, for instance,) are like each other in *many* essential peculiarities, then we may conclude, with *probability* (according to the law of analogy), that they will be alike in their other peculiarities also. The tetters and chronic fever and ague are *like each other*, as regards the tumor of the spleen, the intestinal catarrh, the periodicity, and even as regards the Therapeutics; hence, they *probably* accord also, in their properties and in their essence."

This is followed by a comparison of the tetter with the chronic intermittent, *i. e.*, with the *fever dyscrasia*, in regard to the similarities of the accompanying circumstances, the Therapeutics and the antifebrile treatment of the tetter with Arsen., Quin., Capsicum, Digitalis, Apiol., Salicin, Phloridizin, Tannin, Coniin., Kreosote, Tar, change of place, etc., which always had the most favorable results.

Finally, Dr. Poor quotes the assertion *ex post* of Van Swieten, "Non est anxie disputandum quomodo remedia propinata agunt, modo constet, ea profuisse." [We should not anxiously dispute how remedies administered act, if it is only clear that they were of use]. And, in conclusion, says: "I *venture* to assert that the tetters and the fever crisis were induced by the same forces (causes); that the nature of both diseases is the same; and, finally, that the tetters and the fever crisis yield to the same treatment."

Hence, in order to discover by induction a necessary truth, the opposite of which is impossible, we must seek for the cause of Dr. Poor's finding *exceptions* in his observations, which disturb the exactness of his operations, and finally compel him to speak only of a probability; for, where the probability determines the conclusion, there we have only imperfect inductions, which can lay no claim to being necessary truths. The actual relation between tetters, etc., and fever crisis is quite another, as will be seen hereafter; and it is too hasty to draw inferences from Pesth to Hungary, and from Hungary to everywhere. Hence, from this example of the connecting together of similar cases, we only learn the fact that some rule must lie at the bottom of them; while that rule is, as yet, by no means discovered, as such a rule would admit of no exceptions.

§. 76.

As a most brilliant example for the history of *induction*, the following induction of Newton is always adduced: *Major proposition*,

from experiment and observation: The planets move about the sun according to the three laws of Kepler. 1. The radius vector describes equal areas in equal periods of time. 2. The figure of the orbit of the planets is an ellipse, in one focus of which is the sun. 3. The squares of the sidereal revolutions are as the cubes of the mean distances. *Minor proposition.* The first law indicates that the central force, which always draws the planets from the tangents of their course, has its seat in the sun. The second shows that this force operates in the inverse ratio of the square of the distances. The third, finally, announces that this law of the efficiency of the force, holds good, not only in the course of single planets, but from orbit to orbit. *Inductive conclusion.* The planets are attracted by a force of the sun, which decreases with the square of the distance. The phenomenon of the planetary motions is hence, by this conclusion, recognized as the result of gravitation, of the law of gravity.

From the stand-point of natural history, however, this very induction, so celebrated and even to-day received as incontrovertible, is, if rigorously examined, undeniably partial and *dubious*. For the attraction of the sun truly directs the planets constantly from the tangents of their orbits, according to the law of gravitation, but only when a *second* force is given, which prevents it from yielding to this central force, so as not to fall into the sun, of which force nothing appears in this induction. However, according to the dualism of mechanics and of the reciprocal action between the earth and the sun, a reciprocal action between the earth and a third mass must hold the equilibrium of the entire movement, without which, the wonderful harmony and obedience to law, in the midst of the apparent lawlessness of position, the proportion of dimensions and the times of transit of all the planets, could not be explained. It would militate directly against the fundamental law of nature to assume the partial effect of an attraction without any effect of repulsion; neither of the two can exist in isolation. Every motion has *two* conditions, of which one belongs to the body, the other to an external cause, so that an individual and universal motion are always perceptible, alike in organic and inorganic nature.

Wherein, now, rests the error in this celebrated conclusion, set forth as a master-piece of induction? Clearly in this, that Newton transferred a perception, plain to him, from the *sphere* of the earth, to the *sphere* of the planetary system. The apple, for instance, which falls from the tree, lies entirely in the sphere of the powers of the earth; but if anything without the earth should have influence upon its fall, and could disturb it, then it must, in the short course of its fall,

describe a curved line, as does every object thrown by us horizontally, the curved line of which object shows the resultant of two forces.

I adduce this most remarkable of all examples of inductive conclusions, in order to show that every inductive conclusion which *transcends the sphere of its major and minor propositions*, especially the limits of the domain which is to be investigated, and which is scientifically marked out, must necessarily be inexact or false, and just as false, according to the laws of Nature, as it is false to seek to draw a conclusion from the domain of physiology to that of pathology, or, from both to that of Therapeutics. Again, it is striking, that, logically the conclusion may be justified, while, in reality, it contains a contradiction, just as is the case with the law of gravity in its application to the planetary movements. At the bottom of this, again, lies the difference (which is overlooked) between the *cause* and the *conditions*, between the causal law and that of reciprocal action.

§. 77.

To these cases I also add, for instance, experiences in Chemistry in their unrestrained application to Therapy. If I have a patient in whom the excessive secretion of gastric acid, after digestion, corrodes the mucous membrane of the stomach and produces cardialgia, and a chemist says to me that I must give some neutralizing substance, *e. g.*, Natr. carb., to effect a cure, then this hope is *without foundation*, and not to be realized. It will, to be sure, neutralize the acids formed, *i. e.*, one condition of cardialgia, but not the other, which must be present, in order to make possible the general result of the excessive formation of acid; or, when a physiologist says, de-o-lorize your drains and cholera will cease, for it frequently depends upon the drains filled with cholera dejections: this supposition, also, is partial and doubtful, because cholera disappeared in a hundred places, in which all the drains were full of cholera dejections, and so remained for a long time. These are merely forms of induction from one sphere of operation to another, or, from this to one of reciprocal action. They all belong, as we shall see anon, *to the second deductive operation*, and this determines their true worth. The sphere of the conditions for the formation of an excess of acid in the stomach, is not that of the chemical laboratory and of the laws of nature discovered there, but it is the sphere of the laws of a changed form of reciprocal action of the organism itself, which have but little in common with those of chemistry, which can reach its separate parts only. The sphere also of effluvia and emanations, is likewise not that of the reciprocal action

between two specific miasms and the organism. Such conclusions remain fallacious, whether they come from Chemistry, Physics, Physiology or Pathology.

§. 78.

Induction is thus the connection of a law with the facts of a department of science, while *abstraction* is the separation, or the presenting of a part, from the sum total of our perceptions. Both, however, form a thick net for a defective art of observation in which many a bird permits itself to be ensnared. In the *Journal der Pharmacodynamik* by Dr. Reil, a skillfull experimenter presents highly interesting results of his provings with Phosphoric acid. He observed, after taking Phos. ac. to the amount of sixty drops, that it was found in the urine in greater quantities than after a larger dose. It surprised him to have found that, in proportion to the amount of Phosphoric acid taken, the organism discharged a *greater* quantity of acid when a *smaller* dose was taken, than when a larger one was taken. "Hence it appears," he says, "that although we were accustomed from small doses of drugs, to expect small effects, and more marked effects from larger doses, there may be *circumstances under which small doses of drugs may produce the inverse of larger*. If Homœopathists would "make these facts of use in the support of their principles of cure," he continues, "it is first to be shown that all other remedies act like Phos. acid, as they claim for their principles universal validity."

With this unjustifiable abstraction, to which that fact did by *no means* lead, we stumble anew, as we have so often done, upon the pest of the experimenters of the day, their failure in the art of observing. By these experiments, no relations whatever to Homœopathy could be inferred, and those affirmed *flow from the fallacy of not observing given facts*; for the observations of Homœopathy with Phos. ac. are far older and more numerous, so that the efforts of this experimenter can only be considered as yielding a very moderate addition to our knowledge, and this [addition] was obscured by his skepticism. If, on the other hand, the experimenter had known the laws of induction and abstraction, he would then, instead of hitting upon a subjective, and hence an empty opinion, have gained, from his thankworthy experiments, the most brilliant pearl in the crown of his acknowledged industry.

In every diagnosis and indication which we seek to establish, we have to *reason from the effect to the cause* in a two-fold manner.

In the first place, we have, as regards the *diagnosis*, to infer, from the symptoms of the disease, the quantity and quality of the cause of the disease. The quantity of this cause we learn from the intensity of the disease; the quality from the nature of the altered function and nutrition of the diseased part, from its opposition to the physiological life. All these things we learn by mediate perception. If, now, *one side of the indication* consists in this, to know what effect those substances have, which we wish to use as causes of cure, so that we may possess, from their effect, a surer prognosis for the success of the cure; then the *other side of the indication*, on the contrary, consists again in an inference from the effect to the cause, in so far as that we may recognize the action of these substances as that specifically belonging to them, *so as not to fall into doubt*, and not to *confound* these effects of the drug, in a given case, *with the symptoms of the disease*.

We no longer learn this by mediate perception, however, but abstraction and induction must separate for us the true from the false.

In order to meet all possible errors, we must hold fast to the rules of the various forms under which we are in position to form abstractive and inductive conclusions. There is, for instance, an *incomplete*, an *empirical* and a *rational* induction.

To the incomplete induction belong *probable conclusions*. It arises from the incomplete knowledge of the rules of spherical division, or of the parts of a whole. It is indicated in conversation by the adverbs "mostly, usually, sometimes," etc. Thus, for instance, it is stated in §. 61, that Digitalis operates *chiefly* as a febrifuge. That is an arbitrary division of the whole sphere of operation of Digitalis, which, on the other hand, appears also as a so-called diuretic, and an antiphlogistic also, in the *Materia Medica* of the physiological school.

In the midst of such conclusions, the region of truth borders upon the domain of error. All is left to contingency, and that is contingent, the diametrically opposite of which is possible.

What physician could ever follow up a therapeutic treatment which might possibly produce the opposite from what he had intended? A useless question; for it happens daily in the course of physiological medicine, as is plain enough from the manner of their prescriptions and conclusions. Conclusions from the frequent similar return of the same events are probable conclusions; they characterize the *incomplete induction*, and do not exclude the contingent failure.

From the current literature, I do not remember at this moment an example more appropriate for showing what an *incomplete induction* is, than the following:

"Duchenne had been treating, for a month, with good results, a patient suffering from one-sided paralysis of the muscles of the face, by means of inductive electricity. At the request of the inventor of a new galvanic apparatus, he passed a very feeble current from the instrument upon the paralyzed muscles, which contracted very slowly. In the same moment, however, the patient saw a blinding flame in the eye of the same side, and cried out, 'I see the whole room in flames.' 'The patient was blind, and remained amblyopic in spite of the most energetic treatment.'" Duchenne made use of the *knowledge thus obtained*, of the powerful action of galvanism upon the retina, and, supported by further investigations, he subsequently cured entirely a very sad case of weakness of sight, with diplopia, by galvanism. As soon as the moistened exciters were laid upon the closed eyelids, the subjective appearance of light (phosphene) was observed, and the patient, given up by the best oculists, after years of treatment, suddenly saw, and could discover the smallest objects, so that he could pursue his calling undisturbed. (Duchenne-Erdmann, The local use of electricity, etc., page 17, Leipzig, 1858).

Had Duchenne sought to give account to himself of what he intended, had he sought, not to expose himself to accident; in a word, had he thought of this, that he must form a guiding principle for himself, before he ventured upon his work, then this logical rule would have at once reminded him (though, truly, it is nowhere to be found in the physiological school,) that he committed a great sin, not only against humanity, but also against the art of experiment and observation, when he hoped to be able to determine, *a priori*, the What, the result of his investigation upon premises, as yet unknown, while he knew not the action of the new apparatus, either upon the human organism, or upon the diseased eye.

Further, he would not have fallen into this inexcusable error, had he considered the How and the Where. For he could and should use a new apparatus, upon a patient, not before he had sufficiently proved it upon the healthy, as regards *quantity, quality, relation and modality*.

Or must we not clearly know beforehand what necessity of laws prevails in the domain of the experiment to be undertaken, in order to escape the danger of irreparable accident?

That every opinion should be considered according to these four

momenta, is an old discovery of the great Kant, but it remains ever new.

Why did so eminent, immortal a mind ever live, when his very greatest service, the setting forth of these four categories, remains, for us, unused? why do we build monuments to him, forgetting meantime, what infinite labor he has saved us forever?

But our skeptical time discovered some mistakes in him, and, forgetting that we ourselves can produce nothing perfect, rejects, with them, all his works, as if it were better, with Sisyphus, ever to begin anew.

Duchenne was, without doubt, ignorant of the law of Relation; it never occurred to him, *first*, to study the law of the reciprocal action of the galvanic stream with the organism, before he used it on the sick; he formed his opinion, then, according to the laws of the *lower train of thought*, according to those of custom, of the power of association of his subjective ideas, and expected, from the newly discovered apparatus, the same effects, while a change in the cause must of necessity bring with it a change in the effect.

But no one of the physiological school blames him for this error, because they themselves, aside from the empirical, have no other logical instrument than the imperfect induction according to conclusions upon probability, and all of their therapeutical attempts must bring with them like errors. On the contrary, the translator says expressly, on this occasion, "this observation, to wit: that of the subjective appearance of light after the galvanic current, we *owe* to that sad experiment made by Duchenne."

Did the physiological school possess the guiding principle, unliappily not universal, *of first making experiments upon the healthy*, then this terrible mishap would never have occurred. But it possesses so little of this principle, that it even makes merry over it, as Virchow does over drug-provings upon the healthy, which he holds to be useless.

As Duchenne, however, after this sad observation, now used the galvanic current, on one really blind, for the purpose of curing him, he lacked again the leading principle founded on a natural law, and sinned, even against the fundamental law of the physiological school, the *contraria contrariis curantur*, and exposed himself and his patients repeatedly to accidents.

Whoever can find in such motives, a trace of rationality, will, notwithstanding his *asserted* rationality, expose his patients, at any moment, to the greatest danger.

Hence, in such probable conclusions, the sum of *objective* reasons

is wanting, and the attempt is made to supply these by the subjective.

§. So.

Empirical induction is formed from the stand-point of a train of thought furnished by memory, through the blind force of association, which expects similar effects from similar causes, in which, however, the rule is wanting. In dyspepsia, for instance, the physiological school gives emetics; but the emetic, instead of vomiting, sometimes produces diarrhœa. Or, the physiological school is used to seeing increased transpiration follow the exhibition of diuretics; but it is very often deceived in its expectations without knowing *why*. To be able to answer this why, which presents itself at every step, the physiological school makes use of statistics, and all statistical tables lead only to *empirical* inductive conclusions.

By empiricism, or what is tantamount, by the numerical method, we, gain, indeed, empirical cognitions, proportions and similarities, but it never gives us a law or a cause for them, never rational cognitions. Hence, the numerical method comes under the category of *conclusions from circumstantial conception*; and from the proportional number of like qualities and quantities of individuals and forms, no law can be abstracted; would we find this, we must bring into consideration the question of relation and modality.

Thus, when physicians of the physiological school make the experiment, and leave pneumonia, for instance, to get well itself, without bleeding or other help, they have nothing to look for but numerical results, which can not be free from exceptions. But they do not make the least discovery of what might be done better; since, for that, the law is required. And if, for example, as a proof of the favorable result of any method of cure, the small mortality in one and the same disease might be adduced; this would be at most a logical proof, but none according to any natural law, for the logical proof consists in nothing else than in the enumeration of the characteristics of that which is to be proven.

Here, however, the most necessary characteristics are not enumerated, even, and among these clearly should be enumerated, not only the number of the cases of disease, in proportion to the cures and deaths. but, among others, for example, the proportion also of the relative duration of the disease. For it may happen, that, among fifty cases of pneumonia treated under one method, there may be one death, and under another, ten. This might have happened merely by

accident, *i. e.*, from causes, which are unknown to us. But if the characteristic, the duration of the disease, were adduced for each one of these fifty cases of pneumonia, and had been compared with that of fifty other cases treated differently, then the influence of the accident would have already lost considerable ground. The spontaneous course of pneumonia, for instance, follows rules, which do not depend upon cure or death. Hence, when of fifty pneumonic patients, one dies, and all the fifty are sick, on an average, twenty-one days, that is, require in all one thousand and fifty days, while, on the contrary, under another treatment of another fifty of similar cases, ten die, the mean duration of their sickness being thirteen days, and the aggregate six hundred and fifty days, while all the hundred cases occurred at the same time, in the same place, and under the same external circumstances, then this proportion, notwithstanding its ten per cent. of deaths, declares in favor of the latter method.

In the same way we should proceed with the other characteristics of pneumonia, with the presence or the absence, and with the quality and quantity of the exudation, the dyspnœa, the nervous phenomena, the expectoration, the crises; with the complication with other diseases, with the quality of the fever, the pulse, the sounds of the heart, the secretions and excretions, etc., etc. But from this would arise such an infinity of empirical permutations of combinations, that the end would never be seen, even if men could be found who would engage in such an enterprise for their whole lives.

From such experiments and numerical facts, to seek to maintain that any method of treatment was right or wrong, is just as erroneous as if a judge should seek to determine, that such a measure of punishment was right or wrong, because in one year there was a greater or less per cent. of crime than in another. Even crime is a natural event, a result which flows from the reciprocal action of conditions, some of which lie in the individual, and others in the external world.

Here, also, we must inquire in what period of time a certain amount of right force of the will or of an idea, was overpowered by the wrong, and within what space of time it is possible to overcome this wrong force again by the new formation of a right one. The law of the equivalent of this force is the law for the degree of punishment, and gives at the same time the quality of the punishment justified by a law of nature. These laws truly can never be reached by the numeric method. Hence this method is impractical, in every respect, for the establishment of leading principles, and all the more impractical, for gaining an indication.

From these examples. I think, the difference between incomplete and empirical induction in matters of natural science, can scarcely be any longer mistaken.

The law of the greatest number also, so-called by Liebig; after Quetelet, is nothing but the form of empiric induction; *an empiricism* which lacks the knowledge of the laws which govern it, hence it is no law, because knowledge of the causes and conditions from which those numbers proceeded, is lacking.

The existence of things can not be known either from, or according to, their number.

Considered in every aspect, from the numerical method, we can only look for an *empirical* conclusion, as regards a limited portion of the present time, but not in the remotest degree for any rational manner of treatment, whether it is therapeutical or juridical, or what not.

§. 81.

Finally, *rational* induction finds, from the combination of like facts, and occurrences, according to the maxims of mathematical natural philosophy, that is, synthetically, the law which governs them. Rational induction requires, first, facts or experiments, then the explanation of the same according to the existing laws of Nature, from which again specific rules must arise.

Thus we know, for instance, from the experiments of Prof. Wunderlich, in exanthematic typhus:

I. That in favorable circumstances the roseola begins on the third, fifth, sometimes on the seventh day, in which case the remissions occur on the seventh, thirteenth, fifteenth, or seventeenth day.

II. That the failure of the remissions on the seventh day was observed in the severe, *fatal* cases.

III. While, in this form of typhus, the morning and evening temperatures show but slight differences, in *enteric* typhus, these differences are such decisive momenta, that it is most favorable, when the morning temperature in the second week is from one-half to one degree lower than the evening temperature, and the exacerbations do not begin before ten A.M., and the remissions occur before midnight.

In the first three or four days of the enteric typhus, the temperature increases one degree from morning till evening, and falls from evening till morning about one-half a degree. In the second half of the week the evening temperature stands at 31.7, and most frequently at 32.

IV. *Irregularities in this course*, during the first week, are always *alarming*.

V. In this typhus the *period of development* proportionally seldom leads to death, though it often prepares the way for it. The severest symptoms in the worst cases, the most dangerous events occur in the period of the *curative process*, and death depends oftener upon secondary disturbances than upon the essential process.

VI. Even a very marked improvement of the symptoms, if not occurring *according to the type (?) of the disease*, is of proportionally little importance compared with more insignificant improvement *corresponding* to the type, and all *irregularities are dangerous*, and then relapses, exacerbations, complications, hypostrophes are usual.

These are all facts developed by experiment; what is now the logic thereof? of what avail are these observations and conclusions, or rather *inferences* of Wunderlich, according to the categories of Modality, Quality, Quantity and Relation?

As regards modality, the first question we meet with undoubtedly is: Does this type, observed in the course of both forms of typhus, belong to healthy or diseased life? for upon this depends, whether we have to contribute something or not for the right quantity or quality of the crisis.

In order to determine this, experiments upon physiological life are necessary, of course, because this precedes the pathological, as has been said in §§. 25 and 48. In consequence of these latter experiments it is evident:

VII. That these so-called critical events, according to Wunderlich, occur exclusively on the same days and at the same times of day, as, during health, the increased and diminished excretions occur in their alternations, according to the law of proportional oscillation.

VIII. That thus the quantity of carbonic acid given off, and the number of the pulsations are increased, during twenty-four hours, at from 5.30 to 8.30 P. M., and 8.30 to 11.30 A. M.

Now, from these facts, the following inductive conclusions are drawn:

1. It follows, from I., III., VII. and VIII., that both the exanthematic, and the enteric typhus, in their *favorable* course, have their *remissions*, *exacerbations* and *crises* precisely at those periods in which, in *physiological life*, the periodical variations between delayed and accelerated excretions occur.

2. From II., IV. and VI., it is clear, that *all irregularities* in these phenomena, in both forms of typhus, thus in life changed from external causes, indicate, or accompany even, aggravations in the phenomena of the disease.

3. From V., it is clear, even that, in enteric typhus, the period of convalescence is the most dangerous.

4. These major and minor propositions, consequently, contain the proof that no crisis, *i. e.*, that no critical or so-called typical movement, occurs in consequence of the favorable course of the processes of disease, but that it ensues merely from the conditions of the organism, not yet diseased, and accompanies only the favorable course; that, on the other hand, the cause of disease operates even upon these oscillating movements of physiological life to *change them in unfavorable* cases; and hence, that *only these* changes, which occur contrary to the law of proportional oscillation, belong to the process of disease.

Now, were that regularly oscillating, so-called, type, the type of the disease also at the same time, and thus, that of the *changed* physiological life, as Wunderlich assumes, then this would justly lead to the assumption of an end which Nature strives to attain by the production of crises.

On the contrary, it is well established, that the organism, with those normal movements (so-called, critical or typical) in the diseased life, pursues no special *end*; that these movements are rather grounded in its *self-activity*, and that by their abnormal course, nothing else is indicated, than that, in consequence of causes and conditions of disease, marked disturbances have taken place in the interior of the organism, and that they had not been prevented by therapeutics, even during their curative processes.

That is a *rational* induction upon the basis of the art of experiment and the art of observation.

Now, since, above all things, a rational induction must precede the indication for a remedy, *one would think* that the demand for this would clearly arise from the very subject itself. But it was reserved for the mind of a Hahnemann only, to enter upon this only right way. since he, by experiment and observation, proved the effects of remedies upon the relatively healthy, and not till then, drew his deductive conclusions touching their effects and counter-effects upon the sick; but to the Professors of the Universities, to the teachers of youth was it reserved, even to the present day, not to recognize this way, and to be led by, and hold fast to, incomplete and empiric inductions.

Only a very few of them have attempted within a few years, and made drug-provings upon themselves; still more upon animals; in this, however, they pursued *this* object, to find means with which they could in the future combat disease. At the same time, they forgot, in so doing, the deductive method, which will be unfolded hereafter,

and which would have served them as a guide, who would have taught them that they had fallen again into the old error, for experiment alone is not the last instance of knowledge.

§. 82.

MODES OF TREATMENT IN THERAPY.

As a result of this error, they naturally labor under its consequences. Besides their problematical indications, they have also various *modes of treatment* in Therapy, as the Grundriss der speciellen Pathologie und Therapie of Prof. Wunderlich teaches. He entangles himself in a contradiction, since he says, first, "that the statistic method is impossible, on account of the complete and never-to-be-supplied want of this one and only true basis for an empiric treatment, the basis of the cases enumerated." Subsequently, however, he maintains, "that it is only the statistical proving of drugs that can lead to a firm establishment of knowledge as regards their efficacy, and hence to a firm foundation of Therapy." Further on we read, "Although the empirical treatment is to be *rejected upon principle*, yet it cannot be dispensed with in cases where, in a rational way, no therapy is to be found."

Nevertheless, the physiological school always appeals to its *rationality*. But the Rationalists hold fast to a *principle*, the Empirics alone merely to a subjective *perception*; hence, in Therapy, neither Rationalists nor Empirics are of use to us; we must, on the contrary, seek to combine their two sources of knowledge, and that can be done in no other possible way than by that method which I have called the critique in accordance with the laws of nature [naturgesetzliche Kritik].

Wunderlich knew, also, a *purely empiric* treatment, with the character of accident and the expectation of similar cases, as a norm; hence an *empiric treatment*, which leans upon authority, the numerical method, and the *remembrance of favorable results*, finally, a *rational* treatment, which, undertaken with *reflection*, must have motives and material obtained by experience.

What a strange mixture and confounding of various forms of inductions is here presented, will be very clearly seen from what has gone before. That now is called a curative treatment, forsooth!

Reflection and motive, moreover, are subjects of judgment, and *never rational*; a material obtained by experience, also, is not rational; it is nothing more than the accumulation of facts, which have no scientific value, if they cannot be brought into connection with a lawful course of things. But the most exhaustive diagnosis contains

no natural law in the physiological school; how could I bring it into connection with any material obtained by experience? No theory, whether physiological or pathological, leads me to the law of the form of reciprocal action, which any extolled remedy from the so-called "material obtained by experience" enters into with the organism. Hence, nothing can be said here of a rational motive, which is capable of guiding any treatment at the sick-bed.

Thus, the physiological school is supported by a Therapy, the rationality of which, however, may be denied, and by nothing else but *accident* and *probability*, hence, at the best, by an empirical or incomplete induction or faith in authority; but it has no *rational induction*, and a curative plan devised by it, hence, is and must be and remain nonsensical.

Now the method: By the removal of that, the continuance of which hinders the cure, only single phenomena of disease can be *palliatively* relieved, but no disease can be *directly cured* or cut short. For the tapeworm itself, the ejection of which Wunderlich adduces as an example of a direct curative cutting short method, (coupirende Methode) is not the only cause of the disease, but the individual disposition also is a cause, under the influence of which, the tapeworm could develop itself, else everybody, whose wells are very near a hog-yard, must have tapeworms; this worm, however, may be found with many members of a family, but not with all. Hence, with the ejection of the worm, no direct cure is accomplished, and the disease is not cut short; there is not even a hindrance to the cure removed with the worm. Only as we regulate the disposition of the organism, *i. e.*, the functions of the intestinal canal, do we deprive the worm of the support of his life, and render it and its progeny impossible. The newest discoveries, also, in trichiniasis, have shown that this disease does not attack all who have eaten the meat containing the trichinæ, and that we do not succeed in developing muscle-trichinæ in herbivora. In this category of *palliation* belong artificially produced vomiting, purging, profuse sweat, diuresis, etc.

The *expectant method* is also a part of *palliation*, a superficial postponement; *no cures* arise therefrom, and with regard to what Wunderlich says of Rademacher and Homœopathy, I refer him, for the present, to §§. 1 to 8, inclusive.

The solution of this enigmatical confusion in the therapeutical precepts of the physiological school, lies, as has been already indicated, in mistaking the difference between the *incomplete, the empiric and the rational forms of inductive conclusion*, as well as in adducing arbitrary reflections, which have only subjective value, arising from

the lower train of thought of association in which we permit ourselves to be led by the uniformity of previous events. Such a degree of perception permits every thing to be called rational, every thing empirical, and that is very convenient; thereby bolts and bars are thrown open to the arbitrary adoption of opinions, excusing or condemning a treatment, just as may seem best to the individual interest.

The whole method of the physiological school rests—to touch the very bottom—upon the *method of harmonizing* similar cases. This method fails in this respect, that it proves no causality. It is, moreover, incomplete; for, although it is possible that two or more cases, in which the cure of a disease *a* has taken place, have had no other common antecedent than the remedy A, yet this does not at all demonstrate what connection there is between *a* and A.

Hence, from a cure which the physiological school observes at the sick-bed, a conclusion can never be drawn from this result to the remedy exhibited as having been the cause of the cure.

Such a conclusion could only be drawn if it had learned to recognize, by the proving of drugs, the effect of the remedy used, hence, previously had changed the conditions, and had used some substance as cause, in order to learn its effect; only thus can the physiological school, or Homœopathy either, draw conclusions, with any certainty, from the effect to its cause.

§. 83.

If the physiological school will account for its actions and omissions, it must abandon all reflections.

This school has, we will assume for instance, to treat a hydrocephalus chronicus not arisen after any exanthem, etc. Now, above all, it seeks for physiological types and finds a similarity between the serosities of dropsy in general and the cerebro-spinal fluid, the watery fluid of the eye and the juices of the parenchyma. It, moreover, examines these dropsical fluids chemically, as well as the state of the blood in dropsical affections. A difference appeared here between fibrinogenous and fibrinous transudations, while the fluid of hydrocephalus is distinguished by its sameness with that of spina bifida, *i. e.*, by a very small quantity of albumen, with a relative increase of potassa and the phosphates, in comparison with the soda and the chlorides, so that the composition of the salts less closely resembles that of the serum of the blood than that of the blood corpuscles; while, on the other hand, the œdema of the pia mater contains a proportion of potassa and soda very nearly approaching that of the blood-serum.

Now how does it reason in consequence of these experiments of its own, and the results therefrom, as regards the cure of hydrocephalus? None of these results finds in its practice a ready ear. One of its adherents affirms that the collection of water in the ventricles is the main object [of treatment], and gives anti-hydropsics, Digitalis, Cantharides, Squills, etc. to evacuate by the kidneys. Another selects, in preference, the intestinal canal for this purpose, and uses Elaterium, Colocynth, etc., while a third seeks to strengthen, and gives Iron, China, etc.

This is what the physiological school calls giving account of its doing and not doing, but what becomes of the rational induction, the rational treatment?

For the formation of inductions we first require abstractions or leading principles. Now this school says that "*Diseases consist of disturbances of function and nutrition.*" Hence it devolves upon it, not only to discover the disturbances of function, and, in consequence of the results drawn therefrom, not so hastily to count hydrocephalus among the dropsies, where it is still arranged in the text-books; but also to consider the disturbances of nutrition, by which the quality of the fluids of hydrocephalus and those of spina bifida might have offered it still further leading principles. If we seek, however, something *common* both to spina bifida and hydrocephalus, we find that both diseases begin with diseases of the bones, which arise from lack of nutritive material, of phosphate of lime.

From this point of view, all the symptoms accompanying hydrocephalus, and belonging to it, would appear in a very different light. It [the physiological school] would have discovered as cause, the deficient nutrition of the osseous system, in consequence of which the cranial bones cannot grow and cannot unite with each other. It hence follows that the brain, being without the necessary bony support, *falls apart*, and since no vacuum can be endured in its substance, water, that most powerful regulator of the organism, is appointed to fill it; for the ventricles of the brain, and their contents, are the changeable moderating magnitudes, by means of which the change of size of the brain may often be regulated without disturbing its functions; they take up water or not, in conformity to this change. The osseous system, on the contrary, presents no changeable magnitude of this kind; a minus or plus in its development is then always indications of a disturbance of nutrition.

From these results of various experiments and observations, the inductive conclusion follows that, since, in this kind of hydrocephalus, the phosphate of lime is lacking in the bony system, this substance

is not drawn in proper quantity from the food, whether this arises from changes in the process of digestion, or in consequence of improper food, and all the phenomena pertaining to hydrocephalus may be explained from this cause. Hence, from reasons based upon natural laws, phosphate of lime is to be given to the patients.

That would have been a *rational* induction and *indication*; its leading principle pointed to the *law* of nutrition, and this to the *remedy*, although on account of various conditions it alone does not always suffice.

To this is added, now, the *deductive confirmation* of a cure, the exhibition of the proper dose being presupposed; for, after the use of this remedy, the bones of the skull begin sensibly to increase, and, with proportional absorption of the fluid in the ventricles, they close and not unfrequently their circumference is diminished with remission, and, finally, disappearance of all the other symptoms accompanying the hydrocephalus.

After such *experience* every physician should watch the size of the fontanelles of children entrusted to his care, and interfere, as soon as the fontanelles increase in size, and not wait till the disease reaches the last stage of hydrocephalus, and, in similar cases, he will then, with certainty, predict the same result. In this process the *expectation of similar cases* does not arise from an incomplete or numerical induction, but rests upon a *law* which is *called to mind* by former facts, and hence, in this form, belongs to the category of *rational induction*.

It must be clear where that empirical, that pure empirical and that so-called rational treatment of the Professor is to be placed. That the physiological school is without *rational* induction is *easy enough to be shown by its practice*. I can give one example for all, from the same category, in proof of this assertion, from this very disease of hydrocephalus.

To many adherents of the physiological school, the curative effect of phosphate of lime in hydrocephalus is known empirically. However, since, according to the only law by which they allow themselves to be governed, viz., the law of causality, they follow the maxim to continue with a remedy from the use of which they have seen a favorable turn in the course of a disease, and continue till the cure is completed, they deprive themselves of the most happy results.

Thus, in hydrocephalus, they give this medicine uninterruptedly, although a favorable result has already become apparent; yes, indeed, even because they have observed a favorable effect from the drug, to wit, that the child shows appetite again, its increased thirst dimin-

ishes, the vomiting, the pain in the bowels, the diarrhœa do not return, and, on the other hand, the growth of the bones of the skull notably increases, for this very reason they give the remedy all the more persistently, even if not in increased doses. Thus, however, they *necessarily change the former lack of phosphate of lime into an over supply*, and, as soon as the children are over-fed with it, these gentlemen are surprised that the same children begin again to be affected in the bowels, vomit all their food again and suffer with diarrhœa, while the fever returns, the fontanelles begin to re-open, the skull increases again in circumference, the brain-symptoms, once lost to view, return again with asthma, photophobia, sleeplessness. softening of the stomach, hippocratic face, in short, just the symptoms, *corresponding exactly with all those by which previously* they ought to have recognized the *lack* of phosphate of lime in the organism of the child. Now, while they have used this great remedy according to the empirical rule of looking for similar cases, upon the recommendation of others, and, hence do not know how to explain the return of the previous symptoms, they frequently fall into the error of thinking that they have given too little yet, and hence give more, and thus, in their innocence, produce an over-supply of the drug, which must necessarily occasion death. It happens by far the most frequently, however, that, on the occurrence of such aggravations, these gentlemen of the physiological school, on account of their incapacity to establish a differential diagnosis, between the consequences of a morbid cause, and the effects of the remedy given, think of nothing else, than that these aggravations must have been produced by newly occurring injurious influences, taking cold, errors of diet and the like, and now make the most unjustifiable, utterly arbitrary and blind attacks, and, with the treatment, thence arising, lay the foundation for the greatest mischief. Thus, had they had at their command, instead of their leading maxim of effect, a *rational induction* for the establishment of their indication and their *curative plan*, then would they not only have seen clearly the only possible ground for the curative influence of the phosphate of lime, but they would also have known, at the first sign of the relapse, if not sooner, yes, even from the similarity of the present with the earlier symptoms of disease, how to diagnosticate differentially: they would have known that the quality of the drug had now become injurious by reason of the excessive quantity, and they could have known how to remove all impediments to the cure by ceasing to administer the remedy and allowing the given quantity to *work out its effects*. Their *curative plans* are thus characterized; they seek to treat *actively* in order that the organism may maintain

itself *passive* and should be compelled to yield. But the organism is not willing to do this, or rather *cannot do it*.

§. 84.

Of the direct curative methods of the Professor, I have yet to mention the specific empiric neutralization, as he expresses himself.

The idea of *specification* is borrowed by the Therapy of the school from speculative Philosophy. Nevertheless, this school labors incessantly to define a specific treatment *from its Therapeutics*. Every force of the corporeal world consists, according to its nature, in this, that it seeks to change the state of some other body and thereby experiences a change itself. The sum of the mutual changes is then called the reciprocal action; hence, every reciprocal action of two bodies and their forces has a quality or form *peculiar* to itself alone, hence *specific*, which is distinguished again according to its *degree*. Hence Quinine, by itself, is not a specific, but only in relation to the form of the reciprocal action into which it enters with the organism. This may, indeed, be various, according to its degree, but this, as is manifest, does not affect its specific nature. Accordingly, Quinine itself can only be called *specific*, in so far as every substance of the external world is in general a specific; as it is dissimilar to *certain* parts of the organism, and thus is attracted by them, or similar and is repelled. It is impossible that all parts should be thus; but only *separate* and particular parts.

The idea of a specific remedy expresses thus a *mutual relation* between it and parts of the organism, and this must be found out empirically by physiological drug-provings. For some parts of the organism it is a relation of *immunity*; for others one of *attraction*; for others still, one of *repulsion*, and this ever *vice versa*. There is, for example, a specific form of intermittent fever which is cured by Quinine on these grounds, and, as regards its *intensity*, by the *quantity*, or, the dose of Quinine thereunto corresponding.

On the other hand, there are many forms of intermittent fever which show, by their symptoms, that they do not come into the sphere of the specific effects of Quinine, at the best in part only, and then they are not cured by Quinine; sometimes, it is true, they are suppressed for a while, but the general state of the patient has thereby become worse, the fever returns again, or instead of that, sequelæ ensue.

Thus, for example, one of these forms of intermittents is specifically characterized as follows: the chill occurs every evening at eight o'clock, continuing the whole night through, with no heat or sweat following,

and not till four A. M. is the apyrexia complete. This form of intermittent *does not yield at all* to Quinine. If we misunderstood, now, the law of specification, according to the doctrine of the physiological school, which considers an emetic likewise as a specific, because it almost always produces vomiting, then we shall often apply the causal law no less amiss, and often think that the quantity may have been too small. We should, perhaps, in such cases, increase the dose of Quinine, but find that, in consequence thereof, the fever not only did not cease, but dropsy or consumption would ensue, because Quinine must necessarily produce these sequelæ, which belong, according to experience, to the specification of its reciprocal action with the organism; must produce them, according to the degree of its intensity, which naturally increases with the quantity, hence, when given in larger quantities, and for a long time, as is the rule in the physiological school, in the so-called obstinate cases.

According to this law of specification, §. 27, or, *of the difference of species, the laws of formation* and shape are permanent, through all changes of phenomena, as long as the conditions thereto exist. The designation "specific" thus belongs, not only to separate bodies of the external world and their forces, but also to their combinations, with the organism, into a new form of reciprocal action, and this we observe most manifestly in *drug-provings*, which are undertaken according to the rules of the art of observation and of experiment.

§. 85.

Hence Quinine is no specific against intermittent fever in general, but only *in relation* to a particular specific form thereof. Still more untrue is it to say, with Wunderlich, that the Sulphate [of Quinine] is a specific against lead poisoning, or that it produces an empirical specific neutralization; for the sulphates, in lead poisoning, enter into a chemical combination with the lead itself, without the aid of the organism, and form a third body, foreign also to the organism, although at the same time harmless, while the Quinine, unchanged, is discharged by the urine, as at least the experiments of the physiological school teach.

The ignorance of this school, touching the law of specification, cannot be more clearly expressed than in its own words, where it identifies it with neutralization. Only such a substance is to be called a *specific* which, alone and without other aid, in its reciprocal action with a specific form of disease, can restore again, without fail, the previous normal type in a functional or nutritive manner, just as the

malarial air of the marshes, under certain conditions, times and places, always produces the same specific form of intermittent fever. That many physicians, on account of the similarity of the reciprocal effects and forms of marsh atmosphere, with those arising from the abuse of Quinine, often cannot tell whether a case of intermittent is produced by the former cause or the latter, does not at all change the immutable laws of nature; *though the character of danger* will naturally stand out all the more prominently. The physiological school lacks the law of prognosis for differential diagnosis and for answering the question, which is the effect of the morbid cause, and which of the remedy.

In short, a so-called rational therapeutic method or manner of treatment, can and must rest on *natural*, and hence, necessary laws, and not be regulated according to other subjective ideas. It has to consider, not only one or another part of the disease, it *must*, on the contrary, always seek to act curatively upon the *whole form* of the disease in hand, upon its *totality* in the strictest sense of the word, and, where it is possible, with only *one* substance from the outer world, *because, generally, but one cause produces the totality of the disease*. There is, hence, only *this* so-called rational therapeutic method, and thus only one.

That physiological medicine is certainly incompetent for such a task, does not alter this truth at all. This school has, thus far, reached the point only of contesting, on the ground of its customary patch-work, this truth, (the reality of which we shall hereafter demonstrate,) while it would be more rational, by experiment and observation, to acquire the necessary knowledge thereof.

§. 86.

Before we can speak, in general, of a treatment or method, according to which cures should be undertaken, we must have examined the way in which drugs operate. Even in this respect, there is a great difference between the experiments of Homœopathy and those of the physiological school, as regards principles. The principle of the Homœopathic school consists in this, to find the law of reciprocal action between any single drug and the organism; that of the physiological in this, to discover a causality, which may be directed against the disease. Hence the experiments differ less than the conclusions based upon them.

Let us return again now, to our Professor extraordinarius, Privat-docent., §. 78, because his experiments, and the assertions based upon them, present many points of view, as examples of a neglected art of

observation, and, upon the whole, he does not belong to the *Diis minorum gentium*. but is the one who has furnished decidedly the most, and the most prominent items, as regards a fundamental knowledge of *Materia Medica*, under the banner of the physiological school.

In the same work on the relation of the size of the dose to the amount of the effect, he says, among other things, that, if $P. O_5$ owes its efficiency to its remarkable relation with Kali, it would make a very great difference, according to the end to be attained, in *case of patients in whom it would develop similar affinities as with those in health*, whether it produces a retention of the Kali, when given in small doses, or an active excretion of the same, when given in larger doses.

In the meantime I take notice of this confession, accidentally uttered, less because it may serve as a confirmation of what has been adduced in the foregoing paragraphs, than because the physiological school seeks to establish the opposite view, whenever it undertakes to attack Homœopathy.

“Thus it is the balances and burette,” cries this same extraordinary Professor again, “by which we can learn, without any doubt, whether any substance deserves the name of drug. One will not, henceforth, venture to speak of the so-called dynamic drugs, for we know, that force is the expression of matter. As those instruments in chemistry and physics made a final end of forces without ponderable and measurable matter, so they will, in *materia medica*, furnish the proof that curative forces are dependent upon the chemical and *physical* properties of *ponderable* matter.”

The latter, in some respects, no one will deny; nevertheless, in subsequent paragraphs, we will demonstrate that curative forces are dependent upon the chemical and physical properties even of imponderable matter. Moreover, it by no means follows from these experiments with $P. O_5$ that it is the balance and burette which, under all relations, mark substances as drugs. It is all the same whether we speak of matter which produces diseases or of substances which produce cures, because, in both cases, the same general laws hold good, so that, indeed, each may be measured by the other. But I should like to ask for *that* balance and *that* burette with which the Professor could have weighed or determined the *physical quality* of a *motion*, for example, of a fever produced by a remedy, etc.; then I could very easily reach the bottom of the laws of therapeutics. Neither can we wait till chemistry has found, for us, the affinities which exist between the substances of the external world and those of the organism, together with their equivalents; hence we must, for the present,

measure the motions, which we see appear in such chemical combinations, and that will be quite sufficient.

§. 87.

Having, in the above, discussed the contrast between pathology and physiology, I must now, in opposition to such assertions, indicate the difference between chemistry and therapeutics.

The chemist takes a substance which he wishes to examine, in order to learn how it is related to others, hence, he must also take these others and bring them into such a form that they may, with *certainty*, enter into combinations.

By this he learns the combinations and separations, according to the laws of the force of attraction or affinities of bodies, but *a force of repulsion he knows not at all*; for even chemical *separation*, according to chemical observation, is only accomplished by the variety in the degree of the *attraction of separate bodies*. Hence we have chemically the simple, double or predisposing affinity. In this, weight is decisive here; the qualities may be weighed together with the quantities, *because, for chemistry, no discrimination can be made between the two*, and the most decisive token of a chemical union is made only by the proportions of weight under which this union takes place, from which finally the combining weights, or the *equivalent*, are determined. This, naturally, can only be accomplished by means of balance and burnette, and with bodies which can be had *separate*.

In comparing relations of combination, either oxygen or hydrogen have been taken as units, to which all results are to be referred.

The great difference, however, between this chemical process and that of Therapeutics, consists in this, that Therapeutics has to do with bodies of the *internal* economy of the organism in their combinations with those of the outer world. But, in order to learn how they are related to each other, it is impossible for us to take *separately*, parts of the living organism from its whole, in order to establish their relations to other bodies, provided we wish to go to work in an exact manner, according to the rules of the art of experiment; for, we find in the organism, not only forces of attraction between its substances, but also *forces of repulsion*, as in all processes which occur in molecular motions, and these can only be observed in *the form of a unit*, while, in the parts separated from the whole, they can be observed only in a changed state, or not at all. Hence, there follow, from combinations of the outer world, forms of reciprocal action in the organism, whereby, from the quantities, only the *degree* of the intensity,

but, from its motions, its qualities announce themselves; particular *relations* to particular organs, tissues, etc., which can be recognized by changed forms of nutrition and function. These combinations, too, we must be able to refer back to two units, viz., first to that of the proportional oscillation within the *constant* sum of the substances and forces of which the specification of the organism is composed, and then to that of the *changed* form of these substances, forces and oscillations in consequence of pathological causes. But since, in general, *with no quantity* of substances of the external world, which are intended to be used in proving the form of their reciprocal action with the organism, any unit is given, to which such obtained combinations could be referred, it is necessary that these quantities should be proved or observed, not only from their medium, for which the traditional doses might answer, to their maximum of intoxication, but also from their *medium back again to their minimum*. Hence these provings could *not* be considered as complete with any one particular quantity.

§. 88.

The essential differences between chemical processes, those of physiological provings and therapeutical treatment, are thus evident, so that chemical experiences may, indeed, throw some light upon a few of these latter, but never can furnish any *governing principles* for a *curative procedure*. Hence the balance and burette can only be used in a very limited manner, and only for ascertaining the final products of such provings, from which alike restricted conclusions may be drawn, regarding Physiology and Therapeutics, in the form of the second deductive operation. Force is, indeed, the expression of matter, but the force of matter does not act according to its volume merely, but also according to the *velocity* which it is capable of imparting to another body. In the chemical combination of two *simple* bodies, the specific gravity naturally decides, for it gives, at the same time, the measure of the quality for this end; but with drugs, the force of their *quantity* within the *indivisible* organism is to be separated essentially, for the art of observation, from their *motion* or *quality*, which latter must exert a different influence upon different qualities of the organic parts. Whether a substance deserves the name of a drug, hence, depends not upon its quantity as shown by the balance and burette but, mainly upon its *imponderable quality*.

We observed, after various doses of Belladonna, a series of phenomena occurring in various progression, one after the other, according to *time*, and these momenta of time, within which the quality of the

Belladonna produced changes according to form and locality, we can as easily measure, as the intensities resulting from the quantities thereto used. We have, hence, in this respect also the *advantage* over chemistry, which keeps a measure only for quantities, but not for qualities.

While, moreover, these reciprocal effects of drugs determine for us, at the same time, the measure of the organic, physiological or pathological *resistance*, we possess in therapeutics, with them also, a measure for the movements of the *pathological* qualities and their quantities, as soon as we do not start arbitrarily, with a traditional medium of dose, but proceed according to the law of the art of experiment. For, what we perceive in bodies and designate as qualities, is nothing more than the variety of their quantity.

Thus we obtain, by such investigations, the most exact *equivalents of motion* between the accidental influences of substances of the outer world upon the organism, and those of drugs. Even upon these grounds, Therapy must go its own way, undiverted by its elementary sciences, and can very well dispense with the late annoying demands of physicians, upon chemists, as soon as these gentlemen have learned their own powers.

§. 89.

In the inductions from his experiments, we miss, moreover, in the case of that Professor, every useful leading principle; they were experiments from curiosity. Unable to raise himself above the usual level of his powers of thought, he is surprised by his own experiment, and overlooks the very principal thing, viz., *to reflect upon the circumstances* under which small doses of drugs can produce the converse of larger. He is blind to the law, that the effect never can be explained by a *cause*, where a reciprocal action comes into play, but only by the *conditions which form the combined event*. All this happened to him according to the law of the lower train of thought. The habit of thinking, according to this lower train of thought, as heretofore, and not otherwise, is so firmly rooted in him, that not even an experiment is able to resolve his doubt; on the contrary, it adds new doubts to his old, and he prefers rather to despise those who would have led him into the right path, than to ask for their counsel.

If his inductive conclusions are erroneous, it happens in consequence of his extreme adherence to the modern experimental tendency of our times, and he is all the less able to raise himself to *abstractions*. While induction rests upon *external* observation of the material

world, abstraction draws its conclusions partly, indeed, from external observation, but partly, also, from observation of our *inner self*. Without all mathematics, without an extensive acquaintance with the laws of Nature, abstractions are impossible; they degenerate always into empty hypotheses. It is impossible for a child, who has once seen the blade of a knife in water, at once to make the abstraction that all other bodies would be similarly refracted. Not induction, but abstraction is the indication not only of a microscopical thinking, but also of one according to natural laws. The faculty of thought, however, is not simply born; it develops itself the more rapidly when it is educated. With the art of experiment alone, the teachers do not attain to making discoveries, and so little do the pupils attain to it, that, for many years, the young gentlemen often have been sent home from the universities with such a want of experience in the art of abstraction, that they are hardly qualified for assistants. On the contrary, they possess all the greater practice in the art of experiment, by which they stupefy many a Nestor of medicine who has kept behind in these things, but who, on the other hand, has to complain of their practical uselessness in consequence of their acquired fidelity to convictions, which, in every other direction, is as much to be praised as it is to be condemned in the domain of science.

If our experimenter had become familiar, if not with the laws of proportional oscillation thereto belonging, at least with the laws of reciprocal action, then, in the place of his unfruitful conclusions, he would have abstracted, from his experiments, this law: in the reciprocal action with the organism, all substances of the external world produce a specific form of this action to a certain degree, from which point, onward, the form of this reciprocal action is so changed, that it, as we are wont to say, turns into its contrary. Then would he, instead of throwing a skeptical crumb at the feet of Homæopathy, which is simply ignored, have cried out, *εὐρήκα!* Hahnemann gave you an hypothesis, I—the law! and the blame lies upon the prevailing uncritical skepticisms, that this could not have happened.

Finally, it was not worth the while to make such a bustle about the results of these experiments, as others have already found the same. Thus, both Kali and Natr. nitricum, when taken internally, during the first days, produce an increased excretion of urea, but under a continued use, a diminished one. The same holds good, also, with the eliminations of Quinine. Indeed, in the *Materia Medica* of the physiological school even, there are many such occurrences to be read.

Another adherent of this school, made, for four months, the most exact observations upon himself possible, and found that nearly three-fourths of the oxyures were passed when the moon was waning, and only about one-fourth, while it was waxing. The greatest results were observed during the last quarter, up to the new moon, both as regards the number of days and the quantities in which the worms were discharged. Hence, he considered that the *popular opinion* about the more copious discharge of oxyures during the waning of the moon, was well founded, and found it rational to commence worm cures, as far as oxyures are concerned, at the time of the waning moon, especially eight days after the full moon, *although*, in this statement, he guards himself against all exclusiveness. The good man did not know that the proscribed Homœopathy had attained this truth long ago. At the same time, the corresponding remedies are in her possession, and she knows that, under certain circumstances, just the contrary obtains from what the learned gentleman observed in his own person. But now, upon *his high authority*, the popular worm-cure will become rational. We cannot obtain a Therapeia according to the laws of nature, nay, not even a rational one, so easily as that.

§. 90.

The confirmation or non-confirmation of such assertions is furnished only by the *logical instrument of Therapeutics in specie*; for all previous forms of the art of observation do not suffice thereto.

It is not incumbent upon Therapeutics to solve the problem of progress within *one* given domain; it must discover the law of effect from *various* efforts, that is from those even of the changed organism, it must hence learn to know the laws of causes and conditions of *two* domains, quite distinct from each other in their mutual effects, and must also be able to determine *beforehand* the common result thereof.

I intentionally touch lightly, in the course of these lines, upon subjects which *cannot* be investigated *by experiment*. In such cases, *natural laws* and forms of inference must serve us as clues, and facts as *verification*. In this situation, the practicing physician daily finds himself with his peculiar art of observation.

Experiment, truly, permits innumerable combinations of circumstances, which are not found in nature. But, along with this, it is necessary that we should be able to separate for ourselves a natural phenomenon which shall be the subject of investigation; then we can transpose it in unlimited extent as to circumstance, in order to inquire

after its laws, while we introduce one known object after another into the experiment.

But, if it is not in our power to produce or separate a natural phenomenon, then an experiment is impracticable. Thus it is in Therapy. Here, then, we cannot assume as causes, morbid matters, or the so-called remedies, and see for the first time, at the bed-side, what they bring forth; that we must know *beforehand*. But even the effects, the pathological processes and products, cannot be taken, in order to inquire by *what* they have been brought forth.

Hence it only remains that we take causes outside of Therapeutics, and previously observe their effects upon the relatively healthy, and this can be done by *physiological drug-provings*. Then we can take the same causes in order to observe whether the same effect does not fail in the sick, and whether they fulfill the object therewith connected.

For this, now, the logical instrument of *deduction* serves us. It consists in three operations. The first is a direct induction, from experiments and observations already completed, hence from the physiological provings of drugs in relation to the circle of the reciprocal action of each substance proved, with the organism.

The *second* is a further leading principle, deduced from the *first*, for the undertaking of new experiments and observations, which principle is directed to this, to inquire whether those substances, proved even in the altered combinations of diseased life, find useful application for curative purposes or not.

But the *third* operation, without which the two previous have no other value than that of a supposition, presents the *verification* or *falsification* of the two previously made suppositions, with regard to the aim contemplated at the sick-bed.

If, now, the first and third operations have been completed, according to the necessary and fully expressed rules, then a law of specification is always found, from which then, according to the no less completely fixed rules of *abstraction*, such *indications and prognoses* may be established, as will permit us to look no longer for a contingent, but a necessary result, for all future similar cases, and which are free from the fallacies *ex post* and present the surest token of a Therapy based upon natural laws; for if the sphere of the effects of a remedy have become known to us by its proving upon the healthy; if we have further, a case of disease, in which the morbid cause has affected the same parts as that drug did in the healthy, then there is given to us, with the drug, as soon as we have applied it, *the known cause* which must have produced a change in the same organic parts, whether in case of alleviation or aggravation. In both cases must this effect of

the drug be different from the morbid cause, and correspond with it only as far as the form is concerned. Hence, we possess, in consequence of this procedure, *a conclusion from the specific range of an effect which has ensued, to a known cause*, hence, no *ex post* conclusion, as is the case in the physiological school, which does not know the full compass of the effect of its remedies.

Moreover, because the *physiological school utterly lacks this logical instrument, all its remedies have become gradually obsolete*. The most precious remedies, approved for centuries, it throws away, but not at all because they have actually become unfit for use, as might chance from the tooth of time, but because, in want of *deductive reasons* for using them according to natural laws, all remedies, without exception, refuse their services. It hence rightly despises on theoretical grounds, or rather it would, according to its pretended exact tendency, rightfully despise all authority and commendations, if it would conform thereto confessedly in *practice*, which it apparently carries on independently of its *theory*; for it has no substitute for that which is rejected, and knows not how to deliver itself from the dilemma of this theory and practice.

What an uproar there was, for instance, at the wonders that Kreosote, Napthalin, etc., did — in many cases — and now no adherent of this school thinks any more of using these indispensable remedies, because they are, for him, without indications based on natural laws, to seek which, the prevalent skepticism does not permit, and for which the prevailing curiosity for experimental results finds no time. Thus the Therapeutist needs *two* different experiments to acquire that *experience*, which he must carry with him to every sick-bed. To distinguish between them we may call the first experiment, for the first deductive operation, the *primitive*; the second, for the third deductive operation, the *demonstrative*, since it has to furnish the confirmation of the presumption from the second deductive operation.

§. 91.

Proud of its physiological acquisitions in modern times, the physiological school labors to repudiate *everything old, a priori*, as if our predecessors had been incapable of making observations and practical experiences. It rejects them, however, as it does everything not brought forth by itself.

Nothing in the history of medicine, does it condemn and despise more than the signatures of the old physicians, who are said to have drawn conclusions from the external characteristics of a substance as

regards its effect in diseases. Thus, according to the ancients, Digitalis must be of use in blood-diseases, because its flowers are adorned with blood-colored dots; Euphrasia was famous as a remedy for the eyes, because it had a black spot in its corolla, which looked like the pupil. The lungs of a fox must be a specific against asthma, because this animal has a very vigorous respiration, and, forsooth, what is called nettle-tea must afford relief in nettle rash, etc. The physiological school of the present day, on the contrary, knows no other point of support than the biological and ætiological conditions, or the pathological products, in order to find a substance which may serve as a remedy. But are its conclusions a whit better than the conclusions of the ancients from their signatures? Because fever has the signature of heat, remedies must be used which abstract heat; this is a conclusion the same in form and value as that, because nettle-rash burns, stinging nettle-tea must be drank. I am free to confess that I have more respect for the physicians of earlier times, and presume that they made those so-called conclusions from signatures *a posteriori*, though incorrectly. It is very probable that they first observed the success of these remedies, and then sought, from some of their external peculiarities, a suitable characteristic according to the notions of those times; that thus the result was the main thing, and the explanation entirely a secondary matter; that, consequently, in the making of new experiments with such substances, a guiding principle, not at all useless, is presented; for, to subordinate accidentally observed facts to the necessary laws of nature, ever remains a maxim of science. Thus, the only question is, to institute new experiments and observations to be able to meet the demands of this maxim, rather than to reject them with self-complacent conceit of wisdom.

§. 92.

As an example of a logical deduction, the following may serve:

Among other diseases, I sought a remedy for the so-called humid asthma, notwithstanding it is held *incurable* by the school. This disease, usual with people of advanced years, begins with chronic catarrh and the symptoms of œdema of the lungs, Over the whole chest may be heard strong, snoring, bubbling, now rattling and now whistling sounds; frequently the hand laid upon the chest perceives them, and they are heard at some distance, and are always associated with accelerated, short breath, amounting to suffocation even, without corresponding heaving of the chest, and frequently with cough and inability to expectorate. Sometimes, in light cases, however, there is

no catarrh present, and only persistent shortness of breath, which does not permit the least bodily motion without provoking a paroxysm of asthma.

It never afforded me any consolation, on the death of a patient, who had intrusted himself to my care, to assume that this event had been declared inevitable by the school. I cannot quiet myself by the unsatisfactory results of others. For it is essentially in the calling of the physician to emancipate himself from the school, and never to forsake, for a moment, the path of progress. Though I had sought in vain for long years, yet the observation would give me no rest, that in examining patients who had died of humid asthma, I generally found nothing of that which *auscultation* and *percussion* indicated during life, that is, none of those enormous accumulations of mucus in the lungs. This fact led me to conclude that there was a *disturbance of nutrition* or a paralysis of the cells of the lungs. At length I found, with our predecessors in their *signatures*, the connection of the lungs of a fox with the asthma.

If, now, any organ or tissue lacks the substance specifically belonging thereto, or if it cannot be introduced or prepared in the laboratory of the organism, then it must naturally perish with hunger; that such a process was probable in humid asthma, followed from experiments and observations on the living and the dead. The experiment of using the lungs of a healthy animal was now permitted.

The physiological school announces, indeed, that, in humid asthma, we must seek to promote expectoration, even by emetics, because the removal of the *masses of mucus* preventing respiration and the formation of the blood, is the main thing; or, it gives diuretics because this asthma becomes dropsy of the chest; or narcotics, to diminish the necessity for respiration, or to relieve the paroxysms of suffocation. The ancients, however, thought the lung of a fox to be a specific remedy against asthma, because the fox had powerful lungs. Which indication, now, is the better founded? The ancients sought to connect, with a rule, an effect frequently observed at the bed-side; the moderns seek no rule, but to combat the phenomena seen at the bed-side as abnormal. But we know that the curative method of the moderns, in these cases, cannot prevent death; thus, it ought to be our task to investigate the usefulness of the other. In such cases, the ancients gave fox lung as a food, without hesitation.

But since heat, and especially boiling or roasting, partially changes the molecular states of all bodies, I wished to avoid this, as well as the influence of the stomach upon it, etc., in fine, I triturated a grain of the dried lung of a fox with a hundred grains of sugar of milk, in

order, as much as possible, to set free the molecules. Since, further, fox lung is used by many as an article of diet, there could be no special danger in using it on the sick, without a previous proving upon the healthy.

§. 93.

The results surpassed all expectation. The first patient was a woman sixty-five years of age, much reduced in flesh; in consequence of the persistent condition of asthma humidum above described, she could only live sitting up bent forward; there was always lividity of the countenance, lips and extremities, together with dropsical swelling of the legs; the pulsations of the heart were irregular, and, in short, death stood at the door and was already looked for by the relatives with resignation. After this woman had taken two grain doses of the above trituration, at an interval of an hour, an improvement set in, apparent even to the relatives, *but without increased expectoration*, and, after the third powder, she could lie down, and fell into a refreshing sleep which lasted several hours, and which she had been entirely deprived of for three days. On the next day, auscultation revealed only a slight trace of the so-called rhonchus mucosus which had been extended over both lungs; the strokes of the heart could be counted again, and intermitted but very seldom; the respiration was so free, that the patient had no trouble to keep up a prolonged conversation, while the day before she could speak but with the greatest effort, and then only short and broken words and in a low tone. The improvement continued every day at this rate, so that after eight days she engaged again in her domestic affairs, which she has continued to do now for five years. The fox lung operated here essentially, and made all the diuretics, expectorants, narcotics, etc., of the physiological school, superfluous. I commit this precious remedy to practical physicians, because I have proved it sufficiently according to the rules of experiment and observation, to know that, in like cases it always has like results, and chiefly for this reason, that every physician who uses it, will consider, with me, that the doctrine of signatures of the ancients is a secondary affair, but, with me, will greatly esteem their therapeutic perceptions, and set them far above those of the modern physiological school.

§. 94.

But though the much derided signatures of the physicians of past ages, (ages which an adherent of the physiological school would say that we had outgrown,) led me upon the track of this remedy, though the result *was brilliant*, though the lungs may contain an acid, the so-called pulmonic acid, which possibly in asthmatic lungs might be lost, or might not be introduced or prepared by physiological nutrition, and this lack might be the cause of the disease, yet these latter are, for the time, only hypotheses, and the first success was nothing but an experiment, only an isolated empirical fact, and might even have been an accident.

Empirical facts, however, contain no final, self-illustrating law, and Therapeutics needs such a law for its practice in conformity with the laws of nature. Therefore in the example of the first cure of asthma humidum, with the problematical pulmonic acid, or rather with portions of the lungs of a fox, the demands of science have not been satisfied in *every respect*. For this end, the proving of this substance on the healthy, for the purpose of a comparison, should have preceded the experiment, in order that the *entire sphere of operation*, in its reciprocal action with the organism, might previously have been determined, and this should have been done, according to the rules of experiment and of observation, by a prover's union.

§. 95.

In the above quoted precept and detailed statement of the physiological school, regarding the properties which should characterize a *rational* Therapeia as such, an explanation is of course omitted from the very beginning, as regards this subject, "on account of the uncertainty of our knowledge of the special effects of remedies to be used." Aside from this, however, I have been quite *in accord with the other requirements* made by this school, as regards a *rational* Therapy, in my use of the fox lung; for "I felt the necessity of accounting to myself for my doing and not doing; acted under motives; proceeded at the outset, according to an anatomico-physiological diagnosis as particular as possible; I further considered with what remedy, under the circumstances, the experiment could be most appropriately made," and thus pursued no other than a *rational* treatment, in the sense of the physiological school.

But how happens it that the extolled rationality of this school says nothing of *results*, as if these were of no value and of no moment?

Is not that the most manifest sore spot of this "rational" Therapy, that it *cannot become security even for any result whatever?* Thus I can lose sight even of this postulate, and, hence the most complete proof is given, that I proceeded in a manner entirely *rational*, in the *sense of this school*; nevertheless, I maintain that *this is really not the case*. I made, at first, a *demonstrative* experiment; for, as the *primitive* one, auscultation and post-mortem examination preceded the treatment, as well as the observations of the ancient physicians, and, from the inductive conclusion regarding changed nutrition, even the necessary *principle according to the law of nature* preceded it.

But what justified me then, in committing this remedy to practical physicians, with the assurance that they will always have the same effect therefrom; what justified me thus *to go out* of the circle of my own observations, and to extend my assertion from the case which I saw, to those cases which I could *not* see?

I propound these questions in order to oppose the too ready commendation or rejection of drugs by the physiological school; finally to show up their inadmissibility and to set forth that which should precede such commendation.

One ground of justification for my commending this remedy lay, I repeat, in the *leading principle* begotten by experiment and observation upon the sick and the cadaver. But the basis of the physiological school rests simply and solely upon their chemical and physical experiments and post-mortem examinations, and this school is so vain, that it really cherishes the conviction that, with them, it has taught its pupils all that may be of avail to them in practice. None, not even a single one of these experiments, etc., is referred back to the natural laws of reciprocal action or of the specification of the organism. Each and every one, hence, is void of absolute truth, as can easily be demonstrated. Should it ever happen that such an experiment should be connected with any law of nature, this school would be quite unconscious thereof, and the fact would remain unknown to it.

§. 96.

Here, in case of the so-called œdema of the lungs, asthma humidum, the inspection of the body gave the lie to the *experiments practiced upon the living by auscultation and percussion*. Something similar must also have occurred to the professors of the physiological school.

In view of the autopsical results, the thought must, however, have occurred to every physiologist or pathologist, of the insufficient nutri-

tion of the pulmonary organs, and, with the intention of removing this fatal hunger of the lungs, by *meeting its demands*, the *leading principle* in accordance with the law of nature was given, *i. e.*, a conclusion, a logical induction from the observations and experiments upon the sick and their cadavers. Consequently, the first and second deductive operations were also completed. The only question now was about the third, *i. e.*, the *confirmation* which, as we have seen, also followed. Thus far, hence, a *deduction* is formed, from which now the utterly unassailable abstraction is drawn, from a case deductively concluded, to all others of a similar kind.

Now in this *abstraction* lay the *second* ground of justification, for my recommendation of that remedy. But my treatment was, in this first case, in spite of the criteria set forth in §. 95, nothing less than rational; on the contrary, it presented, through deduction and abstraction, only the necessary presumptions to characterize it as rational for *all future cases*. This case may thus serve as an example for §. 90.

§. 97.

In order, finally, to prevent the possible opinion that all these detailed arguments for the indispensableness of logical instruments, in dealing with men of learning, were not in place, and that they were not the pillars, sustained by which we can venture only to form conclusions; the following example may serve as a proof, one for all, and all the more, as it contains, not only the forms of abstraction and induction, but also of *deduction*, and consequently ensures a suitable critical view of all these three instruments of the art of observation.

Thus in the Chemical Letters of Liebig, 4th Ed., Vol. II., p. 240, we read as a specimen of the inductive method, the following, which I here indicate with figures, according to its principal forms of inference:

1. The favorable effect of manure always depends, *a*, upon a certain physical property of the soil and upon the presence of a second substance; *b*, of a third; *c*, of a fourth; etc., etc.

2. If one has discovered all these, he then subjects his conclusions to a test, which must show whether he has all his conditions before him, and has overlooked none.

3. Thereupon he attempts in another soil to produce, by the union of the discovered conditions, the same effect, and, if the result corresponds to the supposition, and is alike favorable, he has made a remarkable stride forward.

4. From this special case he can now, in all similar cases, predict the like or unlike effects of the manure, the like, mainly, where he knows that the same conditions are present in the same manner, the unlike where he knows that one of these conditions is lacking or deficient.

5. The expression for the combined action, and, the presence of all the conditions of the effect observed, is now called a law, a *special law*, because it refers to a special case, a particular plant, for instance. If this law holds good for acid phosphate of lime, and "esculent roots," [Rüben] it is not on that account, applicable also to "wheat."

6. But, for every manure, and every plant, similar special laws may be discovered, from which general laws can then be developed, which are expressions for the conditions of the growth, and development of all kinds and *varieties of cereals, all esculent, all bulbous roots*, etc., expressions, which, in their connection, now receive the name of theories.

7. Every mind, be it ever so limited, must see that, in this procedure, there is nothing hypothetical. It is only distinguished from the procedure of the art of experimenting, in this, that thoughts are connected with it, and, since these thoughts have a quite determinate direction, the procedure has itself received a special name, that of the "*inductive method*."

8. The conclusions, to which one arrives after this method, are, as we may readily see, nothing more than the intellectual expression for experiences and facts.

No. 1 contains an induction arising from previous chemical experiments. No. 2 contains an inference after the manner of the second deductive operation. No. 3 has, at the start, a guiding principle, drawn from that inference, for the undertaking of further experiments, and, at the same time, the formula of the third deductive operation, for the value thereby determined, *i. e.*, the confirmation or falsification to be looked for in the experiments hereafter to be undertaken.

Hence in Nos. 1, 2 and 3, the three elements of deduction are contained. No. 4, however, gives the formula of an abstraction from *one* special case to all others, thus an indication of the prevalence of a law of nature, and No. 5 alludes to this law, although in a very dubious manner, that is, to the law of modality, that, with the presence of acid phosphate of lime in the soil, esculent roots will grow, if they are sowed, and none without it. But the inference of modality does not suffice; for, whether every such seed will push its roots into the soil, or into the air, can not be necessarily gathered from this deduction, without a knowledge of the natural law of *specification*.

By this law, is the necessity of the *forms* and figures of nature expressed according to modality, quantity, quality, and relation; without this, our brains, which are placed above our shoulders, might as well be between them, in the cavity of the chest.

Now, if we would give examples for the use of logical instruments for the practice of the art of observation, we must not disregard a law of nature, for we are allowed to judge further only upon the basis of this law. But this disregarded law of nature is unknown to Liebig, at least nothing of the kind is found in his writings.

No. 6 seeks to indicate by a special application of the law of specification, that a further abstraction may be formed, namely this, that, to speak correctly, from the specific form of one plant, whether grain, root or tuber, we may abstract the laws for all species of grains, roots and tubers.

All this, then, we cannot call an induction, and least of all a *theory*; because, for a theory, Liebig lacks the very law of nature necessary, and the subjugation of the facts gathered from the experiments, *to this law*, by which the connection of those results, with that law of nature in question, can be made clear, and by which means alone a theory can finally be formed. §. 9.

The definition of the inductive method in No. 7 is quite too void of all characteristics; for "thoughts," even, if they are directed towards an object, are always *arbitrary* conceptions without any rule whatever, *only subjective*, and in themselves *inadequate* for the formation of a conclusion, at least, for the formation of an induction.

As regards No. 8, it may, moreover, be remarked that this so-called inductive method of Liebig contains thus an arbitrary succession of induction, deduction and abstraction, which is not instructively worded even, and, for one not practiced in thinking, is utterly unintelligible; that, further, the inductive method cannot give "the intellectual expression" of experiences and facts, but must draw experiences from facts, not to mention that even the negation of the same object could have the same value for Liebig as "*intellectual expression*."

Herewith, it is shown from the first scientific authority, that this school cannot teach the art of observation, because it is utterly without any itself. It is true, it has a faint idea that there might possibly be logical instruments for the practice of the art of observation, but does not understand how to use them with that success which must lead it to necessary laws.

When, on the contrary, in this manner, the most ridiculous fallacies *must* be uttered by the lips of the learned, the blame thereof never lies in the facts and laws, but in those who originate them by

“intellectual expressions,” according to their subjective powers of perception.

§. 98.

The doctrine of Hahnemann, that we must try substances of the external world, on the well, before we use them on the sick, created, for many physicians, quite a different interest in this subject. Thus the Homœopathists never ask how such a substance affects single parts of the organism, but, into what reciprocal action it enters with the *entire* organism. Now quite other results appeared than those known to the physiological school.

They found, in the first place, that all substances known for a long time as remedies, or not yet used as such, produced symptoms quite similar to those of diseases which were wont to arise accidentally. They found that all these substances, proved on the healthy, effected changes on the intellect, the morale [*Gemüth*], the sleep and the sensorium, as well as upon various parts of the body, yet always in a different manner, and according to the quantity of any given substance taken. In this manner they brought out groups of symptoms, to which almost all forms of diseases, from other spontaneous causes, corresponded, and, indeed, in a very remarkable manner, just such forms of disease have arisen from the provings of various remedies upon the healthy, which were known to have already often cured similar forms of disease. Thus, Cinchona produced intermittent fever, while Mercury produced symptoms, which, according to locality, even, were quite similar to syphilis, etc.

From these facts various therapeutic laws were deduced.

As regards their reception into the organism, it appeared, therefore, that all substances of the external world, as well as nutritive substances, were subject to the law of *diösmosis* within the organism, and, indeed, the more so, the *more attenuated were their solutions*.

But the most important fact, for our subject, that came to light, was this, that the *specific anatomical construction of the separating walls determined* the possibility or impossibility of the diffusion of various chemical or graduated fluids. Every membrane, and even that of every cell, possesses the law of its specification in its structure, and even *within* this membrane itself, peculiar modifying movements sometimes take place.

While, *in consequence of these conditions of the membranes*, the blood-corpuscles take up iron, the cartilages chloride of soda, the bones silica, the muscles potash, etc., the vessels of the liver draw

from the blood alkaline bile, the vessels of the kidneys nitrogen, the pulmonary vessels carbon, the lacteal glands lactic acid, etc.

But, whenever any of these structures experienced any want, it vigorously draws a *supply of its wants* from its surroundings, and every over-supply it constantly rejected. Hence, these tissues take up absolutely nothing which they are not enabled to take up by virtue of their structure, and *their contents*, and the same holds good regarding what is thrown off. §. 26.

Examples have already been given, as in the case of Hydrocephalus in its relation to the phosphate of lime, and thus also in pathological conditions. §. 83.

A solution having been given, in the degree of saturation suitable for absorption, the therapeutic addition of the phosphate of lime, in case of a pathological state of the system even, will hence, in consequence of this natural law, pass by, *without producing the least change upon them, all other parts* of the organism, which likewise require the phosphate for the maintenance of their existence, but already have it in sufficient quantities, while only the parts adjacent to the portions of the bone diseased in consequence of the deficiency of the phosphate, can take, from this supply, what they need.

Even in *these* natural relations there is no difference established between curing and nourishing, between remedy and food. Even, for the purpose of curing, it is hence indispensable to give drugs in such quantities and in such degrees of saturation *as may exactly meet these conditions*; for every excess would operate as a cause of *pathological* changes against the laws of specification, and could not any longer be solely of therapeutic influence upon the diseased parts by making a circuit around those still remaining healthy, for it must, finally, also affect the parts remaining healthy in their function and nutrition; consequently, it must operate as *a new and additional cause of new changes*, aside from the changes already produced by the previously present morbid cause — an all too frequent result of that inconsiderate quantitatively counteracting medication, unhappily in but too common use, to which physiological medicine is wont to give room among its notions of indication, and by which it produces such abundant, and often irreparable, injury.

MODES OF OPERATION OF REMEDIES.

As a counterpart to the processes of physiological life, given in §§. 19, 20, etc., I present the following modes of operation of remedies:

Giovanni Polli, during the last year, made experiments with substances "which, brought into contact with one another, enter into such an energetic attraction and repulsion, between the various molecules of which they are composed, that the one changes the aggregate conditions and properties of the other into such as are directly opposite. These substances are called ferments."

"In contact with them, fatty, insoluble substances, Glycerine, for example, became soluble; bitter substances, as Salicin, were changed into sweet; odorless into odorous, as Myronic acid into Oil of mustard; Urea was changed into Ammonia, Starch into Alcohol, and substances of but little effect upon man, as Amygdalin, into bitter Olive oil and Hydrocyanic acid." Schmidt found something similar, to wit: that blood freshly drawn, from a healthy man, produces fermentation *neither with Sugar, Urea, Amygdalin, nor Asparagin*; but, if this blood be exposed to the air a few days, *an element* is developed therein, which, in substances containing Sugar, produced Alcoholic fermentation, and, after fourteen days' exposure to the air, another element develops itself in the same blood, which is capable of throwing Urea as well as Asparagin, into fermentation. Such blood, however, exposed, no matter for what length of time, to the air, *will never be capable* of producing fermentation in Amygdalin, while blood from individuals suffering from cholera, is capable, even after a few hours, of *producing fermentation*, not only with Sugar and Urea, but also with Amygdalin.

From this, now, Polli concludes "that the albuminoids of the blood, under certain conditions, may undergo *changes* which give rise to *specific* ferments, not existing in normal healthy blood, and that, in the course of certain diseases, not only is the blood adapted to the production of such so-called ferments, but, in such diseases, the origin of other ferments is also produced, which, at the same time, are more active than those which are met in the simple spontaneous change (?) of the blood."

I take the liberty of merely remarking here, that a normal cannot be at the same time a changed blood.

The experiments undertaken by Polli, upon animals, have led to the following results:

1. "The injection of a certain quantity of pus into the blood vessels, produces such diseases as characterize themselves by numerous abscesses.

2. The injection of substances, in a state of putrefaction, produces the so-called septicæmia which makes itself known by typhoid (?) gastro-enteritis.

3. The injection of substances discharged during contagious diseases, as glanders and farcy, produces again the same diseases.

Assuming, now, that the so-called zymotic diseases, as cholera, typhus, child-bed fever, glanders, poisoning from dissecting wounds, etc., depend upon the presence and operation of specific ferments in the blood, then the question arises, whether it is possible to neutralize and render inactive, these ferments, as soon as they are introduced into the living body, or are spontaneously developed therein."

A question, by the way, which Homœopathy long ago settled in the affirmative. Now, on the ground of his further experiments, Polli thinks that, in the bases combined with Sulphuric acid, we possess a remedy capable of neutralizing morbid ferments in the blood of living animals, and of destroying their effects, without thereby so changing the character of the blood, as to render it unsuitable for the maintenance of life.

That the *Sulphate of soda* can accomplish this, I had already practically demonstrated, two years before, in gonorrhœa, as is well known, and this practical experience has since been abundantly confirmed by other physicians.

Polli finally arrived, after many experiments and counter-experiments, at the conclusion, "that the sulphites possess the faculty of putting a period to all the so-called processes of fermentation, as well as to the putrefactive metamorphosis of animal tissues and fluids; that, further, the effect of Sulphurous acid does not consist in this, that it decomposes the fermenting substance, but rather in this, that it changes its molecular aggregate condition." On this point he thus expresses himself: "These occurrences confirm my (?) theoretic views, and I hence conclude that, if the sulphites introduced by the mouth, can thus change the tissue of the living animal, they hereby acquire the property of resisting putrefactive fermentations for a long time after death even; and further, that the presence of these very sulphites in the living tissues might render these tissues capable of withstanding, even during life, the action of these morbid elements, which constitute the essence of the zymotic diseases."

But the physiological school, to which Polli also belongs, is so sunk in the quagmires of skepticism and dogmatism, that, notwithstanding these precious experiments, it ever falls back into its old errors, and for the purpose of curing, chooses, as a dose, the quantity of the sulphates equivalent to that of the ferments which was injected into the animals, as if the whole quantity of that ferment were necessary to produce that pathological change; thus they give of the *Sulphate of magnesia* ten grains at a dose, and from half a drachm to two drachms a day.

Herefrom a new source of controversy naturally arose; for Polli recommended, on the other hand, instead of the Sulphite of lime, the Bi-sulphite and Hypo-sulphite, in the suppurative stage of pulmonary tuberculosis, in the dose of three or four grains a day; other physicians, however, thought that these remedies were as effectual here as others, and while Polli recommends these salts against *malignant small pox, scarlet fever, measles, pemphigus, pyæmia, hospital gangrene, puerperal fever and dissecting wounds*, an English correspondent remarked, on the other hand, that it was only in the last mentioned (?) diseases that the curative effect of the sulphites was very striking.

§. 100.

Although these questions can be decided exactly in Homœopathy only, and, for the most part, are decided already, yet I will adduce a few discoveries of Prof. Meissner, which may throw a new light upon the internal process occurring under the use of such remedies; but first, for a better understanding of the subject, I will briefly notice a well known experience.

“Since all parts of the body respire, *Oxygen* is found in all, but in what form, is not experimentally determined. Yet it is clear enough from other experiments, that it sometimes appears as *Ozone*, and, at others, as *Antozone*.” Now, according to Meissner, one rôle of *water* consists in this, by its greater affinity to positive oxygen, *i. e.*, *Antozone*, than to metals, to assist the polarization of neutral oxygen, *i. e.*, the separation of *Ozone* from *Antozone*, just like *Kalium* and *Natrium*; only these latter have this peculiarity, that their oxides very readily form *per-oxides* with *Antozone*. Here, the metal polarizes the neutral *Ozone* first, and the oxide, next produced by combination with *Ozone*, takes up, at once, the *Antozone*. Moreover, the *molecular condition* changes the relations of the oxidizable bodies to oxygen and *increases their* oxidizability, a circumstance which, in the Homœopathic attenuations and triturations, is *much* to be regarded.

Ozone forms the negative end of the tension series of the body, Antozone the positive, and the intermediate members are to be judged accordingly. All bodies, pertaining to the tension series, attract Ozone and Antozone, but some, more powerfully than others, according to their position, relatively to Ozone and Antozone.

Hence the electro-negative peroxides of Lead, Silver, Manganese, Nickel, Cobalt, Bismuth, as well as Permanganic, Chromic, and Vanadic-acids operate as *ozonides*, *reducing*, where the electro-positive *antozonides*, the peroxides of Barium, Strontium, Calcium, the other alkaline metals, also the peroxide of Hydrogen and certain organic bodies which become slowly oxidized, as Oil of turpentine, for example, *have acted as oxidizers*, and, *vice versa*.

As I shall again return to these facts, so highly important for Therapeutics, a mere mention of them may suffice here, because Liebig has shown and fully demonstrated that the laws, in accordance with which these phenomena occur *without* and *within* the organism, are entirely the same, and that, in fact, a multitude of processes of oxidation and *reduction* are going on within the organism, since, with every oxidation, a chemical polarization of the inspired neutral oxygen takes place; thus—when inactive oxygen is to be aroused to chemical action—the positive and negative active oxygen always must appear simultaneously, just as never but one kind of electricity can be excited by itself.

As regards the new discovery, that, together with Nitrogen, Carbonic acid and Hydrogen, we exhale Peroxide of hydrogen also, it is worthy of remark, that Zinc, Cadmium, Lead, Copper, during their oxidation in atmospheric air, and, in presence of water, produce the Peroxide of hydrogen, while they combine with Ozone, and the water with Antozone. In this reciprocal attraction between water and Antozone, consists, mainly, the chief part which water assumes in all processes of oxidation in atmospheric air. But Ozone can be absorbed by *Albumen*, and other organic substances, as completely as by an alkaline solution of Pyrogalllic acid or a *solution of Iodide of potash*; *Sulphuric acid* and *Chloride of sodium*, on the contrary, have yet stronger affinity for water than Antozone has. The same is true with *Alcohol*, *Potash-lye*, *Sulphate of Magnesia*, *Chloride of barium*, according to the degree of their affinity to water.

Where water takes on the form of vapor, there it contains Ozone, hence this is found, also, in the expired air.

“Every attempt to analyze chemical processes, to refer back chemical phenomena to their causes, will, according to Meissner, in the future, as it has in the past, always begin with Oxygen, but, hence-

forth, this very Oxygen, will be the basis of general chemistry, in so far as it can exist as Ozone and Antozone, and, both as Ozone and Antozone, enters into chemical combinations."

Finally, I quote, regarding this subject, as yet unknown in the therapeutics of the day, and for the elucidation of practical cases, the following observation of Meissner:

"Diluted solution of Iodide of potash is oxidized by the Peroxide of hydrogen, with the separation of Iodine, as soon as a few drops of a weak solution of sulphate of the Oxide of iron are added. The $\frac{1}{50000}$ of the Peroxide of hydrogen is thereby clearly demonstrated. The quantity of the Sulphate of iron added *must be very small*; with the greater quantities, the reaction occurs either imperfectly or not at all. This phenomenon is thus produced: the Sulphate of iron, already easily oxidizable, becomes oxidized at the expense of the $H O_2$ into an insoluble sulphate of the Oxide of iron, and, at the same time, it transfers the oxygen of another part of the $H O_2$ to the Iodide of potash, producing its oxidation."

As a practical example of this, the following case may serve, which, moreover, is not an isolated one. While yet faithfully adhering to the physiological school, I had to undertake the case of a syphilitic patient, who went through the inunction cure with Mercurial ointments, but who was not yet cured of his ozæna nasalis. I, of course, gave him Iodide of potash, and the appearances indicated that a complete cure had resulted. The strength of the patient, however, was very much reduced, and, in order to improve this, according to the notions of this school, I ordered baths, an ounce of Sulphate of iron to each bath.

After having used the baths sixteen days, an itching spot appeared at the former seat of the so-called chancre, and, after two more baths, a chancrous sore developed itself at this place. The baths were suspended, for it seemed that the Sulphate of iron operated as an antidote to the Iodide of potash. Now, indeed, ulcers in the throat appeared, and the ozæna nasalis had again become aggravated; it, however, no longer gave forth its well known fœtid odor. Happily, I had already made a beginning in Homœopathy, and perfectly cured this man, well nigh in despair, in a few weeks, with *Natrum sulphuricum*, 3rd dec., and he has continued well for sixteen years.

We see in this example, that chemical processes take their course within the organism, quite like those occurring in the laboratory.

Since, however, the substances named in this paragraph are not all proved upon the healthy, and even those which have been proved, have been but insufficiently proved, as it would seem, I cannot speak

very decidedly, about my own experiences, made with them at the sick-bed, but only will say this much, that they may become in future of the greatest importance.

§. 101.

We know, indeed, that all substances of the outer world, no matter whether designated as food, morbid matter or drugs, not only must be of a definite chemical combination, but that they also combine with each other in certain proportions, and that these combinations are possible only according to the laws of the chemical tension series; furthermore, that these laws manifest themselves, also, within the organism; the organism, however, not only combines them into various other matters, but *it locates them also*, as has been said, according to its own laws of specification. As Iron unites, in the laboratory, with Hydrochloric or Phosphoric acid, so also, in the organism, it unites with the Hydrochloric acid of the stomach, and with the Phosphoric acid of various fluids. But, the localization and use within the organism, is no longer an affair of the Iron, but an affair of the organism. Thus it combines, it is true, with the globulin of the blood, but not with that of the crystalline lens. Kreatine, which the organism itself produces, is to be found in the muscular fibre; while the brain, the liver, the kidneys, contain nothing of it, though it is excreted by the latter as urea.

Although all these substances have the blood as their means of transportation, yet the Iron goes, in the blood, in part to its globulin, while another part goes with the blood through the crystalline lens, which, however, takes up none of it. Thus, substances of the external world find the definite anatomical parts of the organism to which they are suited, *by making a circuit around certain parts*, in definite directions.

We find the same, but on a larger scale, when we present the organism with the most varied substances of the outer world, separately, since chemistry can only take, for investigation, what nature presents to it in a lifeless state. Even those substances of the outer world, which we use in the so-called *drug-provings*, or, for curative purposes, seek, and find, in the organism, according to these laws, those substances by which they are attracted or repelled. While they combine with some one, both undergo changes of their chemical composition, as also is wont to occur in the laboratory, but after they have produced certain amounts of labor and equivalent reciprocal motions, they become fit for removal and are excreted.

To learn all these motions is the duty of the physician before he approaches the sick-bed, and even physiological chemistry would gain thereby new governing principles for further investigations, for its own profit, as well as that of Therapeutics, if it would only turn its attention that way.

§. 102.

The laws of attraction and repulsion in diosmosis, not only hold good for the physiological condition of our organism, but also for the pathological processes.

One would find himself grossly mistaken who should deny the presence of diosmosis in the organism, upon the ground that fermentation was an act of organic life. Under spontaneous fermentation, every thing is consumed to the utmost possibility, according to the nature of the substance present, for in this case there is no organic resistance of self-preservation. Spontaneous fermentation may be *analytically compared* with an act of organic life, but it is, nevertheless, a *dead chemismus* in comparison to the fermentation in an animal or human organism, which, according to the laws of self-support alone, and, still oftener, when it produces diseases, can be overcome by appropriate remedies.

It is certainly worthy of remark that protozoa and the like, which present the first signs of a capability for life, are often, in absence of medical aid, the most frightful causes of disease, capable of causing the destruction of human life. But to know the conditions and causes of their origin, as well as of their destruction, and the conditions of the possibility of their action upon the organism, this belongs to the duty of the physician, the discharge of which is by no means so impossible that we need fear them [the protozoa] at the present day, or even construct a special Therapiea against the effects of such ferments. The expression of other views now-a-days, shows lack of logic as well as ignorance in natural science, even among physicians.

The fact of diosmosis, even in the inner recesses of our organism, stands firm forever.

§. 103.

From the laws of diosmosis, most of the pathological as well as therapeutical phenomena, can be explained in their chemical as well as physical bearing, and for a deeper insight into these processes, I

must divide our remedies, as regards these laws, into nutritive and functional remedies.

It is self-evident, that only those substances of the external world of which the organism itself is composed, if they are to be used as remedies, can be called nutritive remedies. On the other hand, all those substances of the external world, of which the organism is *not* composed, and some of those which proceed from its own functions, including the imponderables, are clearly enough to be designated as *functional remedies* in a therapeutic point of view.

In regard to the nutritive remedies, the following is yet to be considered.

For motions arising from any cause of disease whatever, which may have nutritive changes as results, the organism, according to its proportional oscillations, retains, to a certain degree, besides its powers of compensation according to the laws of diffusion, also the power of *never and in no case spontaneously accumulating as much substance as it is capable of accumulating, and of never expending as much as it might expend without injury to its integrity*, as long as function and nutrition are not disturbed. And if they are changed by accumulations or deprivations, it next keeps in readiness for the purpose of counteraction, its oscillating maximum and minimum of substance.

If now, in the special anatomical structure of the membranous separating walls of the cells of the connective tissue, in short, of all organic parts, the conditions are given for the possibility of the diffusion of chemical qualities and degrees of saturation, then we must keep in view the difference between *quality* and *quantity* of substances in relation to this two-fold category, and, at the same time to diseased, as well as healthy organisms, and this difference must hold good with regard to morbid, as well as with regard to curative substances.

I understand by quality of a morbid or curative substance, nothing but the specific properties of its quality in relation to its correlatives within the organism.

When we give Opium, for example, in traditional doses, we observe no other primary correlation of its quality than toward the nervous system, for, though it is carried by the blood to all parts of the organism, yet it manifests its specific influence upon no anatomical locality limited to organs.

But the quality of the scarlatina-virus, for instance, takes the same course as the blood, but clings only to the throat, the eyes, the respiratory apparatus, the surface of the skin, etc., and leaves a number of the other parts of the organism untouched. The springs of Gastein

never show a *qualitative* direction toward the intestinal canal, as do those of Kissingen, no matter in what *quantity* these substances are introduced into the organism, the quantity generally only determining the *intensity* of the quality.

Hence, it finally follows, that *quantities* could never present the only conditions for organic changes, if they did not possess, by their *qualities*, the other necessary conditions for particular localities in particular *directions*, upon which we, in consciousness thereof, can exert a therapeutic influence.

Hence, in all therapeutical investigations, the quantity or *dose* must ever be separated from the consideration of its quality in one and the same substance, *since it is only the quality which determines the specific relations of a substance to the organism.*

§. 104.

These processes must be illustrated by examples, for general attention is but too little directed to them, and such words as the above sound so strangely, to many, that they require to be brought into harmony with language in current use.

In order to set this forth in a better way, I return first to that experiment according to which that private lecturer thinks, among other things, "that because one hundred drops of P O_5 are not yet excreted from the body in twenty-four hours, the several experiments ought to be undertaken with, at least, an interval of twice twenty-four hours, so that the previous dose may not influence the succeeding one." However, it is established by the experiments of Homœopathy, that even smaller quantities of Phosphoric acid manifest their effects in the clearest manner much longer than twenty-four hours, *even for weeks* after their use has been discontinued. Certainly, judging from all his assertions, the entire range of the form of reciprocal action of this acid with the organism, artificially introduced into it, cannot be known to this experimenter, as it is already known in Homœopathy.

We know that the blood contains, under all circumstances, a great quantity of Phosphoric acid and incombustible Potash, and we know that Phosphates and Potash in the blood belong to the blood corpuscles, Soda and Chloride of sodium to the serum, and hence that these substances are carried, by the circulation, to all parts of the organism.

Now this private lecturer further holds, that we may "assume it as a law that, with the *strength of the dose* of chemical bodies, the *strength of their affinities* increases, and if P O_5 in *larger* doses, carries Potash with it in the urinary excretion, why not also in *smaller*,

and why do these latter permit less Potash to be excreted than in the normal condition? What suspends the law of affinity here?" he inquires.

Nothing suspends the law of affinity, that gentleman should have known, because it is a law of nature; but the animal chemismus, which is circumscribed by the membranous resistances of the organic diosmosis, admits of no unconditional comparison with that of the laboratory.

To many, the seeing into such truths must, indeed, be attended with infinite difficulty.

Phosphoric acid, introduced into the organism, in doses of from ten to sixty drops, did, undoubtedly, by no means reach the maximum quantity which can be taken up by the body, and even entered into nutritive combinations with other organic parts than those of the blood, of which parts, many would still take up P O_5 without thereby undergoing any change. The same holds good with Potash. Hence the P O_5 must have carried with it a part of the Potash (by reason of its affinity thereto,) to those parts also, as far as it was possible, and a part of the Potash must have entered into other combinations, for which reason now it was necessarily excreted in less quantities than in the normal state. The experiment has, however, shown at the same time, that, with more than sixty drops, the maximum of the possibility of absorption of P O_5 (a possibility previously still existing with regard to the introduction of P O_5 into the organism,) is not only quite reached, but already passed, and, from this point, the overplus in conformity to the above developed laws, is discharged through the urine, whither the P O_5 , on the same grounds, must naturally carry with it the corresponding equivalent of Potash; for the experiment lasted four weeks, and the P O_5 was taken with intervals of two days, during this period, in *increasing doses*.

Consequently the qualities of the Phosphoric acid and the Potash follow, at first, more extended and other directions, within the circle of their manifold reciprocal action with the organism, than toward the blood alone, and their *quantities* have bearing only upon the possibilities within the maxima and minima of physiological nutrition and function.

Thus we saw nothing, but that the Phosphoric acid, by virtue of the specific directions of its quality, had to enter into nutritive combinations, even to super-saturation, from which point onward the *opposite* phenomenon of excretion followed.

If now the use of the Phosphoric acid had been further pushed, up to the very maximum of the possibility of its excretion, counter-move-

ments in other specific directions of the Phosphoric acid would have occurred, which would then have been more sensible to this gentleman.

These are the processes based upon the well known laws of nature, as results of these experiments, though many of them have escaped immediate perception. But what occurs according to the determining of natural laws, as, for instance, in an organism, this is quite beyond the domain of hypotheses. Yet, to gain a conception of these processes, according to natural laws, we must lay aside hereditary prejudices as regards the effects of substances, as if they were to be exclusively considered, quantitatively or qualitatively; we must not only use the chemical ideas of the laboratory, by the aid of our extended knowledge, with the necessary caution, but even the customary pharmacodynamic ideas must not lead us to think, for instance, in case of Tartar emetic, only of its nauseating, in case of Belladonna, only of its narcotic, in case of Digitalis, only of its so-called diuretic *effects*, and with Phosphoric acid, only of its affinity for Potash, but we must know that these are merely *separate links* of the great chain of the qualitative specific relations of these substances to separate parts of the organism; we must consider all these phenomena and their results as *forms of motion*, which have arisen in accordance with *laws* just mentioned, and which these substances had to effect with those parts of the organism to which they are correlatively related.

We must here make mention of yet another function, namely, of this, that the organism in many ways *spontaneously changes many* nutritive substances, as regards their form, and this, according to the law of its specification, whereupon they must be transferred to just as many various localities.

Phosphate of lime, for example, is contained in all organic parts, not only, however, in consequence of being taken up as such directly with the substances of nutrition, but its necessary quantity is frequently furnished by its elementary constituents present in the body and otherwise introduced, (for example, by carbonate of lime) as soon as, in consequence of a too scanty supply thereof, the parts of the organism unlike to it, require it for their function in a larger quantity. But when, even in pathological processes, as, for example, in one of the specific forms of Typhus, it [Phosphate of lime] can be found in larger quantities in separate organs, as, for instance, in the brain, without increased supply, then this occurs in consequence of a diosmosis *changed* by the morbid cause, and in the case adduced, in conse-

quence of the change wrought, in the functions of the structure of the brain, by the morbid cause.

§. 105.

The so-called changing into the opposite, manifests itself most clearly in the example of the reciprocal action of the Phosphate of lime in case of Hydrocephalus. If this disease arises, as indeed it most commonly does, in consequence of a lack of Phosphate of lime, then this lack is first demonstrated to us by the symptoms of those organs and systems to which the Phosphate of lime possesses a specific tendency by virtue of its nutritive importance, and we can divide the symptoms of this lack into the well known stages. If, now, the Phosphate of lime is given, improvement of all the affected parts ensues, the symptoms of a deficiency [of this substance] subside, and the bones of the skull grow. If we do not recognize this moment as that which indicates to us that the nutritive substance has already brought relief, and consequently must be *laid aside*, in order to observe its positive *secondary effect*, *i. e.*, to observe how *long this relief continues*, and, if we fall into the error of still persevering in its use, then all the organic parts, previously suffering from a deficiency, become affected anew, and now, indeed, *in consequence of an excess* of nutritive material. §. 83. Hereby, again, a real insight is given us into the significance of the *quality* of a drug, since it is the quality which *localizes* the quantity.

This *determination* of a remedy *towards a given locality*, and in this case, of a remedy of nutrition, is that which impresses upon it its *specific* character, and, on this observation of qualities with the co-operation of quantities, which latter merely carry the *degree of intensity* up to an injurious chemical action, rests one entire half of the art of observing at the *sick-bed*, which, for a Therapeia to be conducted according to natural laws, hence, a *practical* one, is of prime necessity.

§. 106.

Thus, all these processes underlie the laws of nutrition and function. Sodium, Potassa, Iron, Magnesia, Lime, Phosphorus, Chlorine, Fluor, etc., are all necessary means of nutrition, as is well known. Their *qualities* describe, according to the law of the specification of the organism, their lines of direction specifically determined for them, (and it must be remembered, with different intensities of *quantities*,) towards the separate organs and parts, for which they have to serve

for nourishment, support and function, according to the laws of diosmosis. Where, in opposition to these laws, from external causes, these, as well as all nutritive or curative substances, accumulate in the particular localities even, appointed for them, above the maximum of the proportional oscillation, or, when they are not supplied above the minimum, then phenomena appear, which we recognize as *symptoms of disease*. At the same time, it is quite a matter of indifference from what *point of application* they are taken up, provided only they are taken up, are carried on further by the fluids of the body, and can be brought to those places which *need them*, according to their own qualities. So also, the fact is well established, that all these substances of nutrition circulate, in every direction, with the organic fluids, till they have reached the *localities* specifically appropriate or correlative to them, and are taken up and changed by the same. The qualities of curative and nutritive substances, and those of the organs, form, therefore, the *specific correlatives*.

§. 107.

It is true, that Physiology now-a-days designates some of these processes as "equivalents of nutrition," by which term, however, we lose sight of all curative means, because the physiological school, unhappily, does not know how to connect anything with the idea of a remedy, which looks like a means of nutrition; on the contrary, it connects therewith something *hostile* to the organism, with which to contend against it and its disease.

With this designation a generalization is moreover given, which we could turn to account in Therapeutics as little as in Pathology, for, with it, nothing is expressed of that which is taking place, and these processes are again manifold, but must be none the less fixed by precise ideas.

Thus, we must, for example, discriminate the process under which the quality of Iron is introduced into the blood, the brain, etc., as regards its *quantity*, and such considerations lead us *to the significance of the quantities of substances*, after we have spoken in general about their qualities; for the quantity of the Iron is one thing in the blood, for example, and another in the brain, etc.

Hence, the laws of the quality, thus far adduced, do not suffice for an explanation of the manner of the operation of drugs. As little as the motion of the planets, and the moon, can be chemically explained, and as little as I see the wave of air, which, if of a certain length, produces the red color, and, only by induction from the phenomena of

colors, conclude as to its existence and size, so little can I see the motion of Belladonna, for example, within the organism. But, from the symptoms which it produces in the organism, I conclude, by induction, with the same certainty of its qualitative and quantitative existence, as soon as I have established, by exact provings with it, the diosmotic lines of direction of its diffusion towards the parts of the organism to which it has specific relations, to the eyes, to the organs of deglutition, etc., that is, as soon as I have established the motions of its specific quality according to time and space, within the organism, and, at the same time, the *degree of intensity* of its motions, which follows from well-defined measures of its quantity.

Hence, we need, not only the chemical properties of the substances which we are to use for therapeutic purposes, but also all other *physical laws under which the diosmotic movements* are wont to take place within the organism.

Among other things we are told by Phoronomy that,

1. *All sensible properties are resolvable into properties of rest and motion and are thereby determined.*

2. We can only observe the motions of a body *in relation to other bodies*; hence, all motion is the subject of *experience* and *relative*, and the force of a body is nothing but the *cause* of the production of a *new* motion or of a *change* in some motion already *existing*.

But that other body is in Therapeutics, as regards a curative substance, *no longer something single*, but it is the organism in *the dependence of its parts upon the whole*.

Phoronomy is the doctrine of the laws, also, of such a motion, although, regarding this motion we have to lose sight of a power which primarily has called the motion forth, as is the case with the reciprocal motions of the organism of the earth and of our bodies; in contrast to the motion according to the law of causality, in accordance to which, when a body in motion strikes another and imparts to it motion by the shock, the first body loses only so much of its velocity as it has imparted to the other. We are now, at last, in condition all the better to consider some of the most general schemata of the motions of curative substances, since, aside from these unchangeable general laws of the material world, we must yet bring into the calculation the law of the proportional *changed* and *unchanged* oscillation of the organism specifically pertaining to it; because we have not to do with motions of separate parts among themselves, as in chemistry, but, at the same time also, and chiefly, with the alternating reciprocal motions of the organism thence proceeding.

In the latter respect it is known that, in a condition relatively physiological, *i. e.*, free from the influence of a disease-producing cause, or, of a drug, both the influential forces of the outer world, and the inner forces of the organism are sufficient of themselves, for the conditions of equilibrium, and that, according to the above calculation, the maximum and minimum of the amount of labor to be performed, and of the tension-forces of the organism must be finite; so that the organism is poised, so to say, above the constantly oscillating sum of its materials and its forces, or, of its resistance against the outer world, as above an imaginary centre of gravity, from one position of equilibrium into another, in a determinate *segment of time*, and there is not a single fact at variance with these laws.

Hence it follows, moreover, and follows especially from well known physiological perceptions, that as the organism cannot sleep and be awake with all its parts, at the same time, or cannot rest and labor at the same time, so it collects at one time its tension forces and at another turns them into living forces, and if some of its parts have become unfit for this work, it must possess functional counteractions, and nutritive supplies for repairing of losses, or, must receive them therapeutically. A nerve, for instance, has lost its faculty of developing living forces, the supply of blood to it being cut off by some exudation or otherwise, then, with this change of function, a change of nutrition is associated, since it loses its calibre, and fat molecules are deposited in it.

There is no power on earth, by the most delicate operation *directly upon this nerve*, as for example, by means of so-called excitants, capable of giving back to this nerve its specific life again. Hence, an effort must be made to operate upon *its nearest surroundings*, which can only be done by substances specific to these parts, and not by excitants of all kinds, and if we can effect this, then the nerve can be cured and restored again to life. Such processes, hence, teach us that we have nothing to combat even in case of nutritive changes which have gone to the length of suspending the function of the part affected; that we must seek, in the simplest and surest manner, to bring relief to the diseased part *by means* of influences exerted upon *the parts adjacent*, calling forth in these surrounding parts, motions which are transferred upon the diseased parts by qualities which are aided by the corresponding quantities.

However, as long as the possibility of the existence of a sick part, *i. e.*, the possibility of nutrition and function, though changed, is not entirely destroyed, we see that, from various influences, various motions often arise, according to the law of proportional oscillation.

In ignorance of this law, some have sought to generalize these motions, and to call *primary effect* that which we bring to pass, and *secondary effect* that which is the reflex action of the organism after the effect is complete. In this, another mistake was made, *viz.*, that it was generally thought that the secondary effect could always be considered and looked for, as the *opposite* of the primary effect, and hereupon indications were to be built up. This could only come to pass by the cotemporaneous but impractical further division of this alternation of phenomena, into *chemical* and *dynamical*, of which the latter were held to be the more enduring. For example, primary effect of Quinine, swelling of the spleen; secondary effect, atrophy of the same: or, primary effect of Ipecac, nausea, convulsive cough, etc.; secondary effect, relaxation of the musculature, etc.

At the same time, the secondary effect was sometimes considered as only an intermediate stage, from which recovery might and should proceed; as, for example, from Alcohol, first, excitement, then bodily malaise, [Katzenjammer,] finally, the normal condition again. And while, with the so-called dynamic remedies, the primary effect was to form the indication, it was to consist, with regard to chemical remedies, in the waiting for the secondary effect; *e. g.*, with Arsenic, primary effect, paralysis and emaciation; secondary effect, convulsions, gain in flesh and invigoration of the body, and other similar arbitrary divisions, which, however, are not taken from practical life.

With regard to such ideas and opinions, I must follow every further criticism with practical examples.

We have, for instance, a superficial ulcer, which, penetrating deeper every day, increasing daily in circumference, with its edges more and more everted, and with color and odor, etc, which leave us no doubt, that movements are going on here which indicate a general process of decomposition, only relatively local, and, consequently, not merely a local, but also general loss of the organic capability of resistance; if we put now a few drops of Fowler's solution in a few ounces of water, and give a teaspoonful of this solution, two or three times a day, we shall observe, in not more than twenty-four hours, from the improved condition of the superficial sore, a pause in the local process of decomposition, as regards the extension in depth and circumference,

for, by the Arsenious acid, the inter-change of matter between the skin and the glue-furnishing tissues is completely suppressed. If we persevere in the use of the drug, the improvement ceases at that point, the ulcer undergoes no further change, but shows no further disposition to heal; on the contrary, if this hint of Nature does not suffice to induce us to dispen^se at once with the medicine, then the improved condition of the ulcer is changed for the worse, and we soon have Arsenic symptoms, with loss of appetite, inclination to vomit, diarrhœa, etc. If, however, we discontinue the use of the Arsenic at the proper time, then, if we notice it for the first time, we shall be filled with astonishment, to see, in three days, at the furthest, the callous edges of the ulcer sink down. But if we should cherish the usual delusion that we ought to assist this movement towards a cure by a repeated application of this drug, another pause in these movements would ensue, and Arsenic symptoms in other parts would present themselves. But if we allow the cure, once commenced, to proceed, then, discontinuing to use the drug, we shall observe, how, in consequence thereof, that movement progresses, how the cutaneous edges lower themselves to the bottom of the ulcer, and how, from those edges, new connective tissue grows as a preliminary process of cicatrization.

But, according to the case adduced, this movement may spontaneously come to a very early end also, but then, not on account of too much medicine, but evidently on account of the effect of the given quantity having reached its acme, without having yet completed the cure, and now, only, are we justified in applying the remedy anew, in order to give the motion, spontaneously come to a pause, a new impulse.

A progress towards a cure *during the interruption* of a remedy, is a nutritive one, and only such a progress, as a so-called *secondary effect*, can, for a therapeutic end, be of importance and be used; and, indeed, it must even be used for this end, because often, even after a nutritive remedy, (as we have already seen, in case of Hydrocephalus), the secondary effect, or, as we should rather say, *the permitting the remedy to expend its force*, can alone lead to a cure; and this occurs, as I must add, nutritively, by virtue of the self-activity of the organism, since, even by a functional remedy, the altered quality of the juices is removed sometimes, and it need not be present any more in the organism for this purpose. The phenomena, under the schema of these substances, as under that of nutritive substances, take place according to the same law of the lines of direction and their correlates, and the *transferring* of their motions, according to quality and quan-

tity, can hence proceed only, from the parts remaining healthy, to the diseased parts.

§. 109.

That the whole question of primary and secondary effects turns upon the dose, not upon the question whether substances operate chemically or dynamically, is easy to demonstrate. But first, we must have decided whether, in this question, we will set out from the *large* dose of the physiological school, or, from the *small* Homœopathic dose, since, in both cases, there are primary and secondary effects. Sulphur, for instance, in the Allopathic dose of the physiological school, produces, at first, watery diarrhœa, as a *local effect* upon the intestinal canal, according to the law of causation; but not always in the Homœopathic dose, because it lacks this local effect according to the succession of cause and effect, for it brings the Sulphur *first*, not into the intestinal canal, but into the blood. Soon, however, diarrhœa is produced, by Sulphur, even in a Homœopathic dose, but not in consequence of accelerated secretion of the inner wall of the intestine, irritated by the Sulphur, but, in consequence of increased formation of bile and of its discharge into the intestines. For this reason the diarrhœa produced by the large dose of Sulphur is, at first, not bilious, though this is the effect of the small dose.

The *secondary* effect, however, in *both* cases, as soon as no more Sulphur is given, is precisely the *same*, to wit, obstruction. But this obstruction is no longer the effect of Sulphur, whether given in an Allopathic or a Homœopathic dose, but phoronomic, the result of the proportional oscillation of the organic activities.

If we take Sulphur in Homœopathic dose only, then we have a *series* of phoronomic changes, according to the law of reciprocal action, by which always two symptoms, the one following the other, show, that, in the interior of the organism, movements have arisen, of which the preceding is always the cause of the succeeding. In this instance we should not, and, strictly speaking, cannot, speak any more of primary and secondary effects, and for the reason that here the primary effect can no longer be established according to the individuality, since in one case, cough with mucous expectoration, is the first thing noticeable, in another, palpitation of the heart, in a third, a hæmorrhoidal flow.

For the sake of curing, we must thus, in many cases, commit such a penetrating remedy as Sulphur in a minimal dose (often after one single dose,) for some time to the counter-actions and reciprocal

actions of the organism, and if the indication has been correct, the result cannot fail, and, all the same, whether we had to give the Sulphur for some kind of eruption, an irregular menstruation, or a case of gout, etc., in accordance with the concomitant circumstances, of which more anon.

Hence the cure of such diseases by Sulphur is effected not in consequence of a *secondary effect*, according to the law of proportional oscillation, as warmth succeeds the coldness of the hand which has been in cold water, but in consequence of reciprocal effects induced by it and propagating themselves from part to part, within the organism, whereby the Sulphur taken [by the organism] may have been moved therefrom long ago. These are, therefore, no secondary effects, but *series of effects* which themselves again have become the causes of other effects, and if we allow these series of effects, or, to speak scientifically, these reciprocal actions, to run their course, undisturbed, then we again may designate this only as "*permitting the remedy to expend its force,*" in direct contrast with the so-called *secondary effects*.

If we were harboring the delusion that we had to produce, or wait for these secondary effects in order to attain a cure, would we thus establish indications, that we had first to disturb the self-activity of the organism so that we might afterwards restore its equilibrium again, then we should, with such senseless indications, which, at best, could be thought of only by the worshipers of the *vis medicatrix naturæ*, have effected nothing but superfluous torture; for, to what would it lead, to give laxatives, that constipation might follow; or to hasten menstruation with Cuprum, Pulsatilla, etc., that it might afterwards remit; to irritate or paralyze the functions of the organism to the very verge of their capability of resistance, that they might be able to help themselves?

We can easily, for instance, benumb uterine neuralgia with Opium clysters at once, even to complete painlessness, and, by their frequent repetition, *cause* them to cease entirely; we should, however, abandon ourselves to the basest deception, should we assume, even in such palpable cases, that the *self-activity* of the organism had here completed the cure; for the uterine neuralgia is always only the result of a change of structure of the womb, which becomes manifest at the time of menstruation, and, if we have weakened and paralyzed the irritability of its nerves so much, all those nutritive changes remain now all the more in their previous state, so that they may, sooner or later, upon the slightest causes, run into the most dangerous degenerations. How could any one allow himself to be governed by such an idea, as

that the self-activity of the organism could effect the *cure* of any changed nutrition or function? Disappointment, as a token of great ignorance, would inevitably follow sooner or later, as the not cured, discharged as cured, from the so-called Institute of expectant medicine, demonstrate to us practical physicians every year.

§. 110.

In order to bring to a decision in a practical way, the contending opinions relative to primary and secondary effects of drugs, let us adduce an example of phoronomic motion.

If we take, several times a day, a few drops of Tincture of Belladonna, our organism experiences in various, but specific directions, an accelerated exchange, and in other directions, a retarded exchange.

When first taking this drug, in *small doses*, and, for some days thereafter, there is evidently a *greater* quantity of Carbonic acid excreted by the lungs, while, during the action of stronger doses, a smaller quantity is excreted. In general, after the use of Belladonna, the excretion of the infusible salts in the urine is *diminished*; on the contrary, the urea, the vesical mucus, the fusible salts, and the extractive matter, are *increased*.

At first, the pulse is *retarded* two or three beats in the minute, while at the same time an *accelerated*, *i. e.*, an increased excretion from the mucous membrane of the organs of deglutition takes place. If we persist in the use of the drug, injection and inflammation of the same parts take place, but now with *acceleration* of the pulse, four or five beats in the minute, and thus beyond the usual individual frequency. Hence, if the capillary vessels in any part are over-filled, the beat of the heart is correspondingly *retarded*; but, if inflammation and swelling take place, then the pulsations are *increased* again, and remain at this height for three or four days even, *without any more Belladonna having been taken*.

These are clearly the *specific* effects of Belladonna, and *specific* counter-effects of the organism, because these occurrences, as often as they are reproduced, must inevitably return in the same manner, and this, as long as the power of resistance of the organism against the influence of the Belladonna is not exhausted, or the movements of the Belladonna are not removed by those of some other substance.

If, for instance, during those inflammatory swellings in the organs of deglutition we take some *drug retarding interchange*, such as Coffee, in repeated doses, then the affections in the throat experience, *at once*, a marked alleviation, and, on the second day, have already

disappeared, while the pulsation of the heart returns at the same time to its individual frequency, and thus much sooner than if these Belladonna affections had been left to themselves.

Coffee accelerates, indeed, the frequency of the pulse, but decreases its *force* manifestly, and the pulse afterwards is retarded below the individual [normal] frequency, and is small and weak. This increase of the pulse, however, is not accompanied by an increased excretion of Carbonic acid from the lungs, as usually occurs in a proving of Belladonna. Coffee not only diminishes the exhaled Carbonic acid, for the moment, but constantly more and more, the longer it is taken, and thereby only the excretion of the solid substances of the urine, the urea, the uric acid and urates, is *diminished*. Although Coffee at first accelerates the movements of the bowels, it yet retards them afterwards, more and more; in the blood, the solid substances of the cruor, the serum, the albumen and the blood cells, are increased, and the latter become even melanotic, as after the use of Belladonna, but they increase so that they manifestly diminish the reception of oxygen and the excretion of Carbonic acid, which, again, is not the case after the use of small doses of Belladonna, when they are rapidly turned into bile in the liver, and are no more brought into the circulation.

But if, after the use of Belladonna, we take Coffee in large quantities, then the inflammatory process induced by the action of the Belladonna, is brought suddenly to a pause, and even the increased secretion of bile, produced by the Belladonna, is suddenly suppressed with, at the same time, an increased frequency of the pulse.

With Coffee, moreover, the augmented frequency of the pulse (a substitute in the motions of the central circulatory system for the stagnation of the blood in the peripheric system,) constantly increases, and, without any inflammatory conditions being associated therewith, (as is the case with Belladonna), this substitution is gradually weakened, and finally lost entirely.

Here we thus find not the least ground for the division of the symptoms of Belladonna or of Coffee, into a *primary* and *secondary* effect; in both cases we saw, on the contrary, reciprocal actions in a specific manner, and varying only according to the dose. A *contrary* effect, however, we saw only between the action of Belladonna and that of Coffee following it, since the latter opposed the motions of the former.

§. III.

It seems to me, moreover, that there is yet another source of strife, as regards the debate about primary and secondary effect in the differences about the idea of "*contrast*," and in its improper use. Thus there is a *three-fold contrast*; a *qualitative*, between the effect of two different bodies upon each other; a *quantitative, according to degree*, between the effects and counter-effects of *each* separate substance; and a *relative*, according to comparison, between the dissimilar effects, which two or more substances can produce by themselves in the organism.

In accepting the difference between the chemico-physical and the so-called dynamic effect of a drug, we are led, by the assumption of a *dynamis*, into the current of Theology, and of the spirit world. Thus it is said, for instance, in a pronunciamento from Brooklyn:* "A motion, an effect, must have a cause, which is not, on its own part, the effect again of another cause, and thus we come back at last, if we would not forever go around in a circle, to the Supreme and last dynamis, God, whose connection with the sensible material world, through the spirit world of Swedenborg, we call *vital force*." That is to be, as we have often said already, the dynamism of Homœopathy, in which a *drug-spirit* is to correspond to those products of nature which we call drug-bodies. Now where is the proof that it was the *spirit of Arsenic*, for instance, in the 30th attenuation, which gave me, for one or two days, constant unquenchable thirst, when I proved this attenuation upon myself? That is shown simply by analogy, it will surely be said, according to which, after a fright even, an increased peristaltic action ensues. That would be the same mode of proof as if one should, according to Mitscherlich, place Alcohol and Sulphur in one class, because both belong to the excitants. Do not these gentlemen perceive that they have entered into analogy only, and are far from having presented a proof? But, since we know of causes of disease which are not perceptible to the senses, as the cause of scarlatina, of measles, etc., so it might be held quite consistent that we should apply a Belladonna or Aconite spirit. To this one might rejoin: "go and let the simple ones come unto you, for of such is the kingdom of heaven!"

But these ideas, which are maintained even by physicians with passion, for no claim can be laid here to knowledge, and which constantly return as often as they are thought to have received their death-blow, these ideas lie deeply imbedded in the nature of the human

* By Dr. Blöde, in Hirschel's Zeitschrift für Hom. Klinik.—C. H'g.

mind, and spread themselves as long as we find men whose education does not permit them to comprehend this nature. Hence, from a scientific stand-point, such ideas must be perseveringly combated again and again, as often as they are regurgitated by men occupying a subordinate stand-point. This subordinate stand-point shows itself, moreover, by this, that it thinks that it has said something when it affirms, that, even to the immortal founder of Homœopathy, the chemical conception of the vital process was an abomination and nonsense. That might then have had some justification, but now, we should [in adhering to it] barricade every avenue of progress in science and erect the banner of lawlessness.

One should assert nothing without *that foundation of facts which is universally* recognized. According to §. 28, chlorate of potash is found, *de facto*, in the blood-cells in particles much smaller than the quadrillionth part of a cubic millimetre, and, in this state of attenuation, cannot be perceived by the senses; hence, *according to the hypotheses of the dynamists*, it is found in the blood-cells as spirit. One sees that the real foundation of attenuations drives the dynamists from the field; and yet they ever raise their ghost-like heads again, not, however, as heralds of truth, but as heralds of the yet possible dominion of *transcendental ideas*, after the pattern of the old, so-called, school of Speculative Philosophy, which, however, never was a philosophy, any more than the theosophic view of Swedenborg.

If the dynamists wish to see their ideas adopted, they should first prove that their assumption is the *only one possible*; that all phenomena in the material world rest, if not on deceit, upon hallucination or deception of the senses, which not only is not proven, but has been shown to be false, for we see at every sick-bed, that our remedies, whether in the lower attenuations or in the high potencies, have the same *specific effect*, hence *must have proceeded from the same material* causes, even though, as is natural, and well known, many of the casual effects fail to appear under the use of the high potencies, which are produced by the lower attenuations. Have I not myself repeatedly shown, that when we would ascend from effects to causes, we must necessarily arrive at something which is not caused; that a series of changes presupposes something unchangeable? But herewith the laws of nature are neither denied nor disparaged.

The sphere of the physician is not the *absolute* totality of the idea of things existing, but it is nature, the collective idea of things, so far as they are throughout connected by virtue of causality, of reciprocal action, etc. The whole theory of the dynamists is the negation of the

material, but this independence of what constitutes a necessity according to the laws of nature consists in the idea, *not in the reality*.

Every dynamic system comes into conflict with the incontrovertible rights of mathematical views.

If the mind of the dynamist is directed to the eternal, the unchangeable, the materialists can oppose him with something quite the same. In the world of matter, there is no beginning and no end, but all is only transformation, transmutation, change. Matter itself is indestructible, imperishable, always and *ever the same* without the least loss. There is also *no* change of quality; a substance cannot be changed into another. Hereupon, experiment and induction are founded, for the explanation of the phenomena of nature, with greater security than the ideas upon the absolute. But, from *ideas* we can develop no positive knowledge, and from them we can *explain* nothing. Therefore, theoretical knowledge and that obtained from ideas diverge, *the one from the other*, and have nothing in common, for the first belongs to *knowledge* and the second to *faith*. Would that the dynamists might at least see this truth, and no longer contend about the "Kaiser's" beard!

§. 112.

The specific motions, which, by means of substances introduced from the external world, are communicated to the constant oscillation of the organism, describe, also, as regards their qualitative relation, *determinate relations* or routes, which may be graphically described; and it is but a defective expression, when one says that Rheum, for instance, *acts* upon the intestinal canal, Belladonna upon the Iris, then upon the motion of the heart, and finally upon the surface of the skin, etc. By such an expression, only separate *qualitative* relations of a kind peculiar, and hence specific to these substances in specific directions are given. As regards the intensity, the *effect itself* depends merely upon the *quantity*, as, for example, diarrhœa follows after a few scruples of Rheum, but ceases, and obstruction ensues, after quarter-grain doses of the same drug. This is so well known that it needs no further confirmation, and is as notorious as similar cases with Ipecac; or as Opium in small quantities irritates, but in large, narcotizes.

If we now ask chemistry about Rhubarb root, for instance, we learn that it is composed of Aporetin, Phæoretin, and Erythrorctin, Chrysophanic acid, Extractive matter, Tannic acid, Gallic acid, Sugar, Starch, Pectine, the salts of Lime, especially the Oxalate; and an ethereal oil. All this united in one body must hence stand in specific

relations to the intestinal canal, in order to be able to induce the above mentioned motions and counter-motions. We do not thereby learn at all *how* it happens. Now, if we inquire of Physiology about the intestinal canal, we learn, it is true, that it contains certain remnants of food, more or less acted upon, together with bile, chyle, etc., and that it consists of the intestinal villi of the mucous membrane, of the connective tissue stratum, etc. Beneath the mucous membrane are smooth muscles, arteries, veins around the villi lymphatici, together with Brunner's and Peyer's glands and solitary follicles. But as little as those dozen *substances*, so little do these anatomical structures of the intestinal canal and its *functions*, which consist in the preparation of food, its transfer to the lymphatics and the discharge of that which is unfit for use. so little do they acquaint us with the mutual relation of these substances to each other. In the domain of the physiological school nothing more is known of this subject than of the relations of similar relations, *e. g.*, the relation between the well known chemical, formal and functional constituents of the eye, suffering from keratitis, for instance, to those of Tartar-emeti, Belladonna, Digitalis, Kali hyd. and all those substances which, according to §. 56, are used in treatment of keratitis. For who has ever discovered the *chemical* relations, for which the physiological school incessantly gropes, between keratitis and these substances, which, to this very day, it applies in a purely empirical manner, with well meant intention to cure this keratitis after the fashion of times past, merely because some X. Y. Z. had once declared that he had cured it with one or the other or several of these substances, though without ever adducing any proof thereof? Or, who in the physiological school could ever determine which of these substances, in a concrete case, *must* have been rightly chosen?

In this desperate situation does the adherent of this school invariably find himself, at the sick-bed, without exception.

And how much does he still lack in knowledge in order to be able to determine beforehand (hence according to the existing laws of nature, assuming that he would know even the remedy indicated according to the laws of nature, *i. e.*, the specific quality) which quantity now was to be selected, or, as here can be no longer any talk about selection, which quantity *must* absolutely be taken.

But, as to *quantities*, the physiological school is, indeed, troubled with no embarrassment; it knows about how much of any substance is generally a *poisonous dose*, as it expresses itself even to-day; hence, what is easy enough, a little less than this is given, and this more or less is freely left to the guess of each one, so long as he does not *stray* into Homœopathic doses.

§. 113.

What, now, does a pathological symptom teach us? A human body, suffering with cold and heat, followed by sweat, presents to the physician, the same altered properties of a single, though very composite body, as are presented to the chemist in the properties of wrought iron, when heated by blows of the hammer, or, when by cooling and absorption of carbon, it changes its molecules into steel. These are all properties *from which we may conclude* that here, operations are caused within this body by external influences, which announce their corresponding equivalent in changes, and, which like motions corresponding to the concurrent changes of temperature allow us to measure, at the same time, the degree of the chemical processes going on within. Wherever we see such peculiarities appear in the human organism, which do not belong to the laws of its specification, there they exhibit to us a chemico-physical effort which naturally is all the *greater*, the more various are the localities which are subjected to change through any cause.

But to the pathological symptoms belong also the injurious contingent effects which, in consequence of too large quantities of the remedy, are wont to occur.

Hence, what is committed to the interior of the organism, with the view of a cure, should only be given in that *quantity* which can push none of the laws of the whole of its reciprocal action beyond their maximum or minimum, or change them.

Every other attempt, whether it be to produce diuresis, purging, or diaphoresis, which rests upon the immediate relation of cause and effect, is hence extremely doubtful, and, in fact, at best only palliative.

To proceed according to this latter relation, truly would be and always has been the simplest thing; it arises from the associations instilled into the mind from youth up, from a known cause, to look for a usual effect.

Accustoming our conceptions in this way to the causal law, prevents us from acting according to the law of reciprocal causality, which is the law of the organism. Of course, in both cases, one event follows *by means* of another, but, with the smaller doses, Rheum, for instance, checks a diarrhœa, *not* only by its presence in the intestinal canal, but also by the manifold reciprocal causalities which it may produce within the organism; in a large dose, it operates, generally, only by virtue of its presence, at some particular locality, producing here the maximum of intestinal function.

For the therapeutics of the physiological school, however, there exists only one transient, direct *effect* of the one body upon the other, of the Rheum upon the intestinal canal, and *vice versa*, in which the possibility of further extending reciprocal causalities, and the question in how far the entire unit of the reciprocal actions of the organism may yet further partake or not, is not thought of; for it aims at *one* effect only, as do surgery and operative midwifery. But according to natural laws, we have in Therapeutics only action and counter-action, without the movable equipoise of the organism being changed otherwise, in any way whatever.

In practical therapeutics, we cannot too often call to mind this essential difference between causality and reciprocal action.

§. 114.

On account of the great therapeutic importance of these relations, it is necessary to present side by side still other examples, in order to gain a more general insight into these mutual magnitudes of motion.

We observe, for example, after one-eighth of a grain of Belladonna or Aconite taken three or four times a day, an immediate and marked decrease in the frequency of the pulse. Whence this phenomenon, so like in form, that is, presenting such a correspondence, from causes so different?

We know from Physiology, that after such doses of Belladonna, the blood corpuscles, which have become less capable of absorbing oxygen, soon disappear from the circulation in the larger vessels, and the secretion of bile which is increased at the same time, shows us, that these corpuscles are carried to the liver in greater quantities than usual, by virtue of that function of the liver which consists chiefly in the elaboration of those blood corpuscles which have become unfit for use. But the Belladonna exercises the same influence also upon the remaining blood corpuscles still circulating, producing a more rapid waste, which can clearly enough be seen by the microscope. The consequence of this is naturally a diminished absorption of oxygen into the blood, and a corresponding decrease in the excretion of Carbonic acid through the lungs; *hence the activity of the heart must decrease*, which is announced by less frequent pulsations.

If we take Aconite in the same dose, we observe a similar process in the blood corpuscles, but there are no counter-movements in the liver, corresponding to that in the previous case; on the contrary, there is a very marked discharge of earthy phosphates with the urine. The earthy phosphates of the blood corpuscles, are to those in the serum

of the blood, as 218 to 550. It is thus evident that the influence of the Aconite upon the blood corpuscles is secondary, and takes place through its influence upon the serum, and, under this process, *the pulse sinks*, upon the same physiological grounds, it is true, as in the case of Belladonna, but not primarily, and not from the same cause. Thus the Belladonna communicates its motions, first to the blood corpuscles, while the Aconite communicates its motions first, immediately to the serum, so that, *from different causes, one and the same symptom* occurs, *i. e.*, each makes its external manifestation, corresponding with the other as regards form and outward manifestation.

But the circle of these varying motions is not herewith complete. As soon as the greatest possible maximum of the primarily excited movements of the Belladonna, in the molecules of the blood corpuscles, has reached the oscillatory limits above described, the capillarity of the portal system is so much affected, as a counter-movement of the organic reciprocal action, that the pulse rises again. If the counter-movement in this system, has reached its maximum, then the movement directs itself upon the oral cavity, the tonsils, the uvula, and the œsophagus. It manifests itself at first by dryness, then by increased excretion of mucus, and, with increased difficulty of swallowing, proceeds to the formation of exudations within these parts, or to inflammation, while, before the latter effect takes place, another movement of the Belladonna announces itself by dilatation of the pupil, etc.

The Aconite movement, on the other hand, in accordance with its specific nature, describes quite another course to other parts than those affected by the Belladonna, and always under the form of other movements and counter-movements. Scarcely has that sediment presented itself in the urine, when there appears, first in the face, then in the whole cutaneous surface, a manifest injection of blood, under which the pulse naturally rises again. If, in this manner, the maximum of the counter-movements is attained in these localities, then appear acute pains in the head and face, then pains in the joints, inflammation of the joints, etc.

All these movements explain themselves by the laws of molecular matter, and those of the specifically different reciprocal actions which must necessarily arise from the connection with various substances of the organism.

At the same time we observe *how, from functional remedies, from plants and their alkaloids, etc., changes of nutrition are wont to spring* as soon as, in any part whatever, the maximum of oscillation is overpassed

§. 115.

Among these function-remedies must also be reckoned some metals, and other bodies, which not only set at work the specific functions to which they correspond, but also evidently exert chemical influences upon elementary constituents everywhere to be found in the whole body. It is well known that most of the metals arrest the general processes of decomposition, even within the organism, and even its exchange, *i. e.*, its nutrition-and-function relations, or its interchange of matter, if the expression is preferred, and this primarily by abstraction of water; but, for Therapy, it is necessary to know what qualities are capable of performing this work, and with which of their *quantities*; furthermore, in what *succession* and *extension*. If we take Iodine, for instance, or, in larger doses, Iodide of Potassa, we shall observe, as is well known, how, in the first days, there is, *a*, increased appetite; *b*, improved digestion; *c*, more abundant excretion of bile; *d*, a feeling of comfort; *e*, exalted power of action; *f*, intellectual vivacity; *g*, improvement of the general appearance. But, sooner or later, according to the individuality, if the use of the drug be persisted in, we have, in the same succession, the qualitative contrast: *a*, want of appetite frequently interrupted by canine hunger; *β*, disturbed digestion; *γ*, diarrhœa and constipation alternately; *δ*, feeling of anxiety and palpitation of the heart; *ε*, depression and general sense of weakness; *ζ*, congestions of the brain, dull feeling of fullness of the head and dizziness; *η*, wretched look with emaciation, fever, etc., with further results.

Even the localities firmly fixed with regard to the influence of a function-remedy, illustrated above in contrast to §. 104, impress upon the remedy its specific character; but no one will be able to see, in the variety of the symptoms indicated by the Roman and Greek letters, a direct contrast, but only degrees of extension and intensity; for, *e. g.*, a good appetite and want of appetite are not at all contrasts, but only *varieties* of function, which must follow each other according to the law of reciprocal action in consequence of the immoderate use of Iodine.

§. 116.

But while Iodine does not remain behind in the body, there is a scheme, one might say, of reciprocal action of substances in juxtaposition, if the process had not to take place after all under the organic conditions of the constituents of our body and those of its living self-

activity. Most frequently this occurs upon the use of other metals in such doses as, in the physiological school are traditionally given, and most evidently in Hydrargyrosis. If the physiological school, no matter upon what indication, (if only to remove a swelling, produced by a contusion), applies quicksilver in traditional doses, even externally in form of a salve, salivation ensues; later, we have swellings of the glands, ulcers in the throat, various eruptions on the skin, all these troubles frequently with long intervals between them, as is well known; and finally, pains in the bones, falling out of the hair, until, at last, this school supposes the quicksilver to have been sweated out, and thus believes the whole matter settled in a satisfactory manner. After long years, however, there appears, in the same patients, another trouble, accidentally as it seems, *e. g.*, a dropsy, local only, as Hydrocele, or general; in short, it seems necessary to give Iodine or the Iodide of Potash. Now we notice sediments in the urine, and if one betakes himself to examine the urine chemico-physically, quicksilver also is found.

Opportunity will be found, hereafter, to establish similar relations following spontaneous causes of disease, as, for instance, upon hereditary causes, but meantime I will only call attention to the fact, that, there are substances, which, when introduced into the organism, in immoderate quantities, are suddenly rendered innocuous by their entering into insoluble compounds, which remain deposited in some part or other, and thus become inaccessible to the motions of the organism; and continue to be so, till some other substance introduced, accidentally or intentionally, into the organism, enters into combination with the very same organic parts in which those substances are deposited, and thus made accessible again to the organic motion, they may forthwith be expelled from the system. Of this process, there are also physiological types in the form, for instance, in which the mineral basis of the bony tissue is united with the animal. But this mineral basis itself again is soluble, and is removed from the organism, as, *e. g.*, in Osteo-malacia, as soon as a surplus of lactic acid has been formed.

Hence, there is a scheme of *juxtaposition* of foreign substances within the organism, which may be met with in practice much oftener than in the text-books on Therapeutics, and thus an example is given to show that it is possible to reach such juxtaposition even therapeutically.

That, finally, such events cannot be viewed as merely mechanical, other experiments show. It is shown, for instance, that quicksilver rubbed into the skin penetrates it. The presence of common salt in

the organism, in a considerable quantity, is also known, as well as that of ozone. Thus, quicksilver, absorbed through the skin, becomes Mercurius sublimatus, hence only the part of the quicksilver which is changed into sublimate is active. All the rest of the quicksilver is as a useless protoxide, as for example in the Allopathic inunction cure—a ballast the body is burdened with.

Would that the Allopaths could at last understand this fact in its bearing upon their use of injurious quantities, quasi-remedies! For the adherents of physiological medicines are still, to-day, what they formerly were, Allopaths, *i. e.*, their Therapy proceeds according to the maxim *contraria contrariis curantur*; they have thus, since the days of Hahnemann, stood still, at the same point, and have here and there made friends, also, with do-nothingism.

§. 117.

We should be liable to the charge of sustaining a great error, should we maintain that the previously adduced schemata, touching the generally oft-appearing forms of reciprocal action, between the substances of the outer world and the organism, return, as regards the substances adduced as examples, always in the same form, as regards time and space, in all cases. That is just as impossible as it is that all men at one and the same place and at the same time could be affected by the morbid matter of an epidemic. The *capability of becoming sick*, depends, indeed, upon some substance from the outer world, but only so far as the molecules and molecular forces of our organism, as regards their volume and density, are so constituted, that they have not sufficient power of repulsion against that substance, or, in other words, not sufficient moveable opposition, or else have an attraction for it, and this is the sum and substance of the general idea of *disposition* to any disease.

Neither does it suffice to introduce a substance from the outer world into any given so-called healthy organism, and to observe the resulting forms of reciprocal action, and thereupon to have in readiness a conclusion as to Therapeutics; the same substance must be tried upon persons of various ages, sex, constitutions, *under the most varied circumstances possible*, according to the laws already given, and the rules of the art of experiment and the art of observation; its effects must be observed for at least thirty-five days, §. 48, and only after the fulfillment of all these demands, can we say that we have undertaken a drug-proving and gained available results.

It suffices the physiological school to administer some substance of the outer world as a given *cause* to any given, so-called, healthy or even sick individual, a few times arbitrarily, in order to see *one effect* therefrom. The laws of the organism, however, and those of the changes wrought in it by the world without, cannot be perceived from accidental causal conditions, and only a complete mistake regarding conditions can cherish the foolish hope of effecting a cure by the palliative destruction of *isolated* symptoms. Upon this great error of experiment also rests a countless host of abortive attempts at cure in the camp of this school, for, if the drug-provings are not conducted strictly according to the rules of the art of experiment and observation, then, an inference from such a proving, to an indication at the sick-bed is a fallacy, arising from a non-observation often of the most essential *concomitant circumstances*.

It is not enough to know qualities of substances in general; to know that Rheum has no *specific* relation to the Iris, and that Belladonna has none to fat, water, etc.; it is no less necessary to know under what qualities of *the organism itself* such relations can possibly arise from substances. These reciprocal conditions also are only found by drug-provings made *lege artis*. If, for instance, the reciprocal effect of Belladonna, already detailed, and that of Aconite, are known to us, then we may surely predict, with these few facts even, (since upon the whole no man is perfectly healthy, and, for this reason, every one must be more or less susceptible to some influence or other,) that those whose *bodily constitutions* adapt them for the motions of Belladonna cannot be so susceptible to those of Aconite. Let us consider, also, all that depends upon the motions of Belladonna and of Aconite, and we gain an unexpected, deep insight into the varied organic economy of various individuals, and another proof is thereby offered of my proposition, *that, Therapy with its drug-provings, can only make progress upon its own domain and territory* and never upon that of its elementary sciences, Chemistry, Physics, Physiology, Pathology, from whose domains it may occasionally *explain* experiences which it has itself made, but can never *gain* any new ones.

§. 118.

If we recapitulate all these previous schemes concerning the effects of drugs, it is readily seen what it signifies, when one says that he means to contend with a disease or to benumb it. To benumb? This question concerns the idea of the much esteemed narcotics. From the laws previously laid down, it follows, that, with the idea of a nar-

cotic, that of a continuous or curative benumbing alone cannot be connected. Narcotic effects can only appear as such, by checking movements, for the moment, by overpowering them. They communicate to the blood and the nervous system such and *so very accelerated* motions, that they manifest themselves after a slight dose, at once, by the greatest excitement, *i. e.*, by accelerated function in those parts to which the exhibited narcotic has a specific relation; for, Opium, for example, describes other lines of direction, and comprises other correlates than Stramonium. In larger doses, however, both, by virtue of the intensity of their movements, overthrow all organic opposition so completely, that all the motions of the organism may be suppressed; this then is called a narcotic effect.

But this narcotic effect does not touch a single part of the organism only, in order, perhaps, to benumb its sense of pain; for the motion, introduced with the narcotic, extends itself, according to its quality, over its lines of direction and correlates, to all parts, and if Opium, for instance, quiets a pain as long as the quantity given is not excreted, then, as soon as this occurs, the old pain frequently returns again.

Since something similar obtains with all other drugs, we must extend our ideas of drugs by excluding *the magnitudes of motion of the quantities and the extension of the qualities*, and we must drop all ideas of narcotics, excitants, diuretics, emetics, laxatives, diaphoretics, and all antis, as antiphlogistics and the like, utterly and forever, as defective, and having their origin in fallacies; from fallacies which assume relations of cause and effect, where only continuous reciprocal causalities exist. Hence, a drug at one time may be laxative, at another an obstruent (Rheum.); now a diuretic, now an anti-arthritic. (Aconite), now an antiphlogistic, now a diaphoretic (Aconite); now a narcotic, now an excitant (Opium); now an expectorant, now an emetic (Ipecac); it may now be an emmenagogue, and now defer menstruation, (Secale), etc., etc.

We obtain from the influences of drugs, that is, through the perception of the senses, only *alternating conditions*, of which one may crowd out the other; hence, with single effects, we cannot express our whole knowledge of any one substance; we should never come, from two or more varied conditions, to a knowledge of the connection, if we should, according to the laws of causality, or that of effects, direct our attention in improperly undertaken experiments only to the one or the other; the law *of the specific correlate, and that, indeed, not only in its qualitative, but also in its quantitative, relation*, is, hence, that which we have to study *for every separate drug*. But the *Materia Medica* of the physiological school never engages itself in accordance

with leading principles, which would lead to such laws. A substance is known to it as a narcotic, for instance, by tradition, and accordingly it seeks to investigate the kind of its *narcotic* effects, and leaves all other phenomena which present themselves, out of sight, or mentions them as *incidentals*, without knowing whence they come, or what is to be done with them, just as if the task of holding fast to traditional quantities were the only one possible.

Thus, twilight, and finally dark night, has overspread this *Materia Medica*; yet the lavish outlay of industry and toil, allows us to hope for a brighter dawn.

§. 119.

We must not omit penetrating still deeper into the conditions of *quantities*, under which those relations of qualities are of necessity not only possible, but also *various*.

To this very hour, this cardinal problem of Therapeutics is unsolved, and much as the desire for its solution is generally felt, little do we know how to satisfy it, even approximately. Yet this problem is one of the conditions which separates the physiological school from the Homœopathic, and which seems to form a chasm between the two parties, to be filled up in the far distant future. In the physiological school there is no scholar who has given an intimation, even, of the ways and means of supplying this most humiliating of all wants, the want of a *determination of the dose* in Therapeutics, *according to natural laws*. All other social Technics have outstripped Therapeutics. A journeyman miller could never become a master miller, who could not calculate how much water he needed for a definite amount of work in his mill. To this very day I have sought, in vain, for a clinical lecturer who could give a *law for the dose*, or even a principle aiding us to find it, and yet is the determining of the dose the first requisite, or it should be, before one should venture to invade the human system for its weal or woe, with substances of the outer world. Why does the engineer, before he begins to erect a building, first determine how great a burden a man can carry on his back, the day through, or how much a horse can carry on his back as a daily task, at a walk or trot, if the greater part of the result does not depend thereupon?

Only to the physician of the physiological school, who is rich in his poverty of such knowledge, is it permitted to overload the organism of the patient with the most various quantities, without knowing and determining *beforehand, how much* the organism can bear of the substance prescribed, within a certain time, for a certain end.

Neither the physiological school nor Rademacher's, possesses a calculation, or even a rule, which might be generally useful for this end, and yet they attack Homœopathy with all the fury of persecution, in the strife over a bit of knowledge which exists neither for one party nor the other. The question is not whether the dose of the physiological school is the proper one, on the strength of tradition, and faith in authority, or upon the basis of a subjective problematical approximation; on the contrary, the question lies quite outside of this strife *pro domo*. It is not to be determined whether the custom of one party or the other is, in general, to be accepted or not, for this strife is, and remains for science, *a matter of utter indifference*, not deserving the least regard. The sole and simple question can only be *what quantity of a substance, regardless of all subjective convictions and incomprehensibilities, is necessary, in order to induce that chemical or physical counter-motion in any diseased part of the organism, which is equal in intensity, and opposite in direction, to that which is induced by the morbid cause, in order to check this latter forthwith, or, at least, to delay it, and then, by repetition, to remove it.*

Hence the task is only to discover *the equivalent of motion* between the amount of motion excited by the *morbid matter* and the amount of motion which we have to oppose to it by some drug; *for the amount of force is the effect, nothing else!* To the solution of this problem, we have then the natural law, according to which the *quantity* contains the measure of the motion and counter-motion; and, hence, for the purpose of Therapeutics, *the right dose must and can be nothing else than that amount of the force of the indicated quality which is equal to the amount of the force of the cause of the disease, and qualitatively runs counter to its course and motions.*

We possess thus, in the very dose, or *quantity of the morbid cause, the measure for the quantity of the dose of the drug to be used*, in order to enable us to check the motions of that morbid substance, no matter whether those motions are chemical or organic, whether they are mechanically checking or motor-motions, but we must not, *vice versa*, allow ourselves to be misled into considering the quality of the external morbid causes which operates now within greater and now

within smaller limits, as the measure for the dose, as is the custom in the physiological school, which custom begets that injurious Allopathic haste and anxiety, together with the great excess of medicinal force; for, on the one hand, those circles of morbidic *qualities* are mostly the deceptive expression of the inner *quantitative* motions which should not prevent a phoronomic conclusion; on the other hand, it does not become scholars to disown the general truth, in accordance with which, qualities, *within the organism*, should not be judged by quantities.

A diarrhœa, or even a case of cholérine, may occur with ever so extensive accompanying complaints, and may alarm the ignorant by the most frightful symptoms; however, if, according to diagnosis, it be of such a character that it may be cured by repeated doses of Veratrum in $\frac{1}{1000}$ or $\frac{1}{10000}$ of a grain, or even less, no conviction of the majority and its quantity of incomprehensibilities can have any determining influence upon the increase of the quantity of the dose. For, if such a small dose, or a much smaller one, of a substance, arrests that diarrhœa or cholérine, then I know that the moving cause of these affections, *without regard to all extension and danger of accompanying phenomena, was not greater in quantity or quality than those small doses of the qualities of that remedy. This law of the therapeutic equivalence of motion*, between the motions of the *morbid matter* and those of the *curative matter*, and the law of the *proportional oscillations*, together support, as immovable foundations, the *other entire half* of the unusually favorable results, which are manifested by cures, although the treatment was frequently carried on according to, and yet in unconsciousness of these laws, and, in case of a favorable result, the accident compensated for the lack of knowledge.

A somewhat more *mathematical course of thinking* would be far more beneficial to practical Therapeutics than one merely microscopical or chemical, although every physician must respond to the demands of these also. *Quantity and quality obey determinate and absolutely unchangeable laws, especially in Therapeutics, as we have seen.* That investigations in these directions are possible, and hence ought to be undertaken by all parties, by whom they have been hitherto neglected, needs no further explanation, for they rest upon the measure of time and space.

Since thus the corresponding *quantity* and *quality* between morbid matter and curative matter contain the only measure for their motions and counter-motions, hence also the measure *for the dose*; and since this is and ever must be, the same for all time, then we are

thereby presented at the same time with the true idea and *the law of the homœopathic antidotes*, since this idea is to be extended exclusively over the law of reciprocal action and is not to be limited merely to the qualitative causality of Toxicology, a knowledge of which, however, we cannot dispense with.

§. 121.

Now arises the still farther question, *according to what principle* shall we, in the special case, once for all, *find* and establish the quantity of the dose? To this chemistry gives us the clue, following which it has itself become great. Neither the traditional dose nor any dose of any substance, hitherto empirically used, can be that *unit*, from which we must set forth in these investigations.

In chemistry, it is empirically established with far greater precision, and, indeed, with the precision of a natural law, what quantity of an acid, for example, is necessary to saturate another quantity of potash in solution. However, no chemist who wishes to ascertain how much potash a certain spring contains, would proceed as if he might assume a given quantum of potash empirically or traditionally, and forthwith add the quantity of acid corresponding thereto and necessary for saturation, to the given quantity of the mineral waters, for, to say nothing about such a process as disregarding all the laws of the *art of experiment*, he must consider that, in dry seasons, all mineral waters are relatively richer in solid constituents than in wet seasons. He must hence begin with the *smallest* quantity of acid and add it, highly diluted, drop by drop, and count every drop till the experiment is concluded. He must thus proceed, even if he has already examined the spring once, since the result is undoubtedly reached sooner and surer, than if he were to experiment at once with greater quantities. However, a previous experiment upon the same spring, presents him with a general point of departure, from which he gathers about how much more or less of the acid he may now give at the outset without making any mistake. Precisely after the same rules of the art of experiment must we proceed to find the *dose*, before it can be approximately determined with regard to any particular case of disease from previous experiments.

§. 122.

In making such experiments, the Therapeutist, however, finds himself in a far more *favorable position* than the chemist, for the inorganic

world contains determinate per cents. of its substances, but the organism does not, on account of the law of its proportional oscillations. In comparison with chemistry, it may be permitted, even here, to speak of re-agents, and thus it may be determined beforehand that a slight plus of the dose never produces any error, since the organism, by virtue of those constitutional deviations, in the quality of its substances, re-acts equally against a plus or minus.

Hence, it is apparent, that, for the purpose of cure, the specific lines of direction of the quality are of *far greater influence* than the quantities, because the organism, by virtue of its oscillations, manages *quantities* much more easily; while the *qualities* remain unchangeable in their influences.

It must yet be considered, however, in regard to quantities, that although not capable of changing the *specific lines of direction of qualities*, they can yet change their *succession*, which can be made clear by a single example. We observed, for instance, in §. 114, the order of succession of the directions which the motions of Belladonna observed, when taken in the dose of one-eighth of a grain, several times a day. But now, if we take, just as often, one-fourth of a grain, the scene changes. On the very first day, the power of sight is diminished, and the pupils are dilated. On the morning of the second day all is well again, but, as early as noon, the pupils are much dilated, and the change in the sight announces itself by inability to read and diplopia. On the third day, on awaking, there is a return of vision and of mobility of the iris. At noon, renewed dilatation of the pupil and immobility of the iris; at the same time, dryness of the mouth, the palate, the uvula, the tonsils, the œsophagus sets in, with swelling of these parts. In this manner, the symptoms increase, till, on the sixth day, inflammation of those parts of the mouth and pharynx, with fever, occurs. This increased quantity has thus changed nothing in the quality, as regards space; its specific direction has remained the same; but as regards time, it has, indeed, effected a change, inasmuch as the affections of the visual organs set in *earlier* than those of the throat, in contrast with the order of succession produced by the quantities of one-eighth of a grain.

Another result of *quantities* we observe, for example, in case of Quinine. Taken in grain doses, its elimination follows in half an hour in the urinary excretion; but the more is given, the more does this elimination occur in inverse ratio to the dose; *while the former increases, the latter decreases*. From these processes it is clear, that small doses always operate more persistently in their appropriate direction, but large ones more *rapidly* in case of substances which are

quickly reabsorbed and eliminated, and the dose of which, consequently, leaves a greater play between the maximum and minimum.

§. 123.

But since, in consequence of immoderate or ill-timed quantities, we observe most distinctly how *nutrition-remedies* become *function-remedies*, and *vice versa*, (which change, however, under a deficient art of observation produces *injurious results*), the law is to be inferred that both, as regards the qualitative forms of their reciprocal actions with the organism, stand in inverse ratio to their quantities.

Many of the facts here mentioned I have gathered from the *Materia Medica* of the physiological school, and practice has confirmed to me the homœopathic indications deduced from them. Why the physiological school can make no use at the bed-side of its own possessions, requires no further discussion.

But that another multitude of causes is contained in the overlooking of these distinctions, which must render void many of their attempts at cure, this also cannot be any matter of doubt.

Hence I *repeatedly* call the attention of my colleagues to the indispensable necessity of *logical instruments*, as the clues which the categories of relation, quantity, quality and modality give us, in order to clear up certain facts, the *investigation* of which *cannot be accomplished* by experiment. Ignorance of these logical instruments among our learned men is so universal, that, in consultation or conversation upon scientific subjects, one might lose his senses from astonishment, or at least become dumb, on account of numerous opinions, to which he has often to listen, since they betray such a want of practice in logical thinking, that, in order to come to mutual agreement with them, one would have to lose an incalculable amount of time.

From what has been thus far presented, it is abundantly clear that neither Chemistry nor Pathology, neither Physiology nor Physics, in and by themselves, are able to find a therapeutic law; nevertheless, these sciences, in their immense progress, are of indispensable value to Therapeutics, and every Therapeutist must be well versed therein, for every advancement which they make, must not only confirm the facts of Therapeutics, but also contribute to enlarge its horizon and our knowledge. Hence, in their bearing upon Therapeutics, they occupy the position of complements. But, on the other hand, Therapeutics, as we have already partly seen, and as we shall see more fully in subsequent paragraphs, develops a multitude of experiences, which

will in turn serve as complements of *those* sciences, so that they are mutually indispensable.

§. 124.

Medical Physics labors to reduce many physiological facts to *mathematical* formulæ, but without practical result. Mathematics is not employed *to cover* unexplained facts with mathematical abstractions, but to *abstract*, from given forms, laws and general rules. It would have been a light matter thus to express, in mathematical formulæ, the given forms of reciprocal motions, between the organism and the function- and nutrition-means. In the eyes of experts, however, it might be thought to work rather injuriously; for we lack, for real mathematical calculations, in order to arrive, from such formulæ, at the particular, too many of the intermediate terms. For the present, it is better to avail ourselves, for a general understanding, of the language of our own science, with the formulæ of the *natural laws* peculiar to it, and dispense with mathematical language and its formulæ, where this does not come naturally, and is not unavoidable; for that language is not able even to express all those laws which control the science of Pathology and Therapeutics. Whoever is versed, both in medicine and mathematics, will acknowledge the truth of this assertion. On the other hand, we lack not only the intermediate terms for this, but chiefly, also, uninterrupted series of experiments. Our experiments extend merely over three, or, at the most, over eight days, by reason of too strong a dose having been given, and are undertaken only by a few. But, even when extending over a greater number of days, these experiments, made by but few, and they for the most part males, are made unhappily with frequent interruptions and omissions of such days as would have been quite decisive (furnishing complementary momenta necessary to the calculation, and hence days which should have come into the account), so that these experiments, for the discovery of laws by mathematical principles, were utterly useless.

§. 125.

In brief, such an infinite undervaluing of the *art of observation* is noticeable throughout the physiological school, that, for many years, complaints have been heard from many Clinics, which give an indication of the causes. These complaints consist in nothing less than the despair of the teacher over the impossibility of *establishing*

the difference subsisting between a disease of spontaneous origin and one produced by art, an impossibility but lately recognized, though frequently presenting itself. Pathology and Therapy were never before sunk so low. Thus, for example, a celebrated chemical lecturer (Wien, Wochenschr. 1858,) thought he had made a new discovery of an old experience — that quicksilver, introduced into the organism in excessive doses, *produced forms of disease similar to syphilis, and in the very same anatomical places*, and called for experiments for establishment of a differential diagnosis between syphilis and Hydrargyrosis. Another (Arch. für Path., Anat. u. Phys., B. XV.,) is urged by this over-anxious and nervous skepticism so far as to say, "*it is clearly doubtful*" whether exostosis of the cervical vertebræ, as a natural consequence of syphilis, accompanied with stiffness of the neck and paralysis of the arms, observed by himself, were to be ascribed to "*a forced water-treatment, or to the disease.*"

Thus, among the teachers of Pathology and Therapeutics, the question still presents itself, how to acquire a *differential diagnosis*; hence, they think that the very next problem must be, to discover the spontaneous course of a disease, before anything is given to act as a remedy, because, no one could know, finally, whether the remedy used has contributed to the cure, or whether, perhaps, the whole course of the disease, to its very cure, has not been such as pertained to the disease, which, in spite of the remedies, took its course without interruption. In view thereof, one may reasonably ask, who were the teachers of these teachers, or, did these teachers possess merely a *theoretical* past? If this were the case, an extensive country-practice for some years would have been desirable for such poor fellows, before they ventured to occupy the chair of teachers. There, if it had not been taught them, and if they were not favored with any personal practical experience, or any special gift of observation, they would have found abundant opportunity to study diseases of all kinds left to themselves. and in all stages; there, not unfrequently, half of all the sick die without having called medical aid; here thus is material enough, for those desiring it, to inform themselves regarding the course of diseases left to themselves and in all stages. They would need only to make it known that they required no fee, and possessed a horse that would carry them safely over ditches and hedges; these would be the only conditions, and they would be called, sooner or later, to the most various diseases. They would find nothing, however, but what was taught in the text-books of Pathology and Therapy; not, indeed of the present day, but those of early decades; and from these books they could obtain the desired knowledge cheaper and more conveniently, the necessary qualifications for

such a purpose being, of course, pre-supposed. Yet this is not exactly the point of these complaints. The calamity lies in the accordance of forms resulting from spontaneous causes of disease with those forms resulting from remedies properly indicated. Whoever is conversant with the literature of the physiological school, can be no stranger to such sad events in modern Clinics, and all the more, because such complaints in this literature are increasing from year to year.

§. 126.

These hopeless tokens of ignorance of the natural course of diseases, left to themselves, date back from the present time some twenty or twenty-five years, at which time, such skeptical investigations at the sick-bed, were first instituted with regard to pneumonia. That in a Clinic, in an Institution of learning, such investigations have become, since then, a necessity, is the strongest proof, not only of *the decline of its Therapy*, but also of its *Pathology*. Were these, then, the acquisitions of unspeakable labors and sacrifices of physicians, of all lands, *for two thousand years?*

We should not fail earnestly to inquire after the causes of these phenomena; and, in this respect, fully agreeing with experts, we may say that the causes lie chiefly in the fact that, for more than three decades, the youthful desire for independence has led men astray to venture but too often a leap from the Jour-room of the assistant, over the lessons of an independent private practice, so indispensable to every teacher, directly into the professorial chair.

He who has made or can make himself familiar with the foregoing paragraphs, will not have failed to notice, that, a cure can be no otherwise possible than by the use of *qualities which possess specific relations to those parts of the affected whole which are spared by the disease*. Hence, since in our previous examples, the quality of the Quicksilver takes the same specific directions in the organism as the syphilitic matter; since the Quicksilver produces ulcers, glandular swellings, pains in the bones, skin diseases, in short, phenomena of disease all similar in form and in the very same *localities* as the syphilitic matter, it is clear, not only, that in this case the Quicksilver *must* be a specific curative means, as soon as the quantity necessary for this purpose, or, the dose, is found; but that it, at the same time, in *an over-dose*, exceeding the maximum of the organic oscillation, must degenerate into similar forms of disease, just as the syphilitic matter produces them: that, however, the art of observation can indicate very well and with all precision, from this similarity in form, the difference

of the causes working together to the same end, and, accordingly, not only rightly diagnosticate, but also certainly cure, and that, too, with quantities *with which all injurious* and persistent consequences may and must be avoided. However, the calamity of the difficulty of such a differential diagnosis to the ignorant, would never have been made a matter of complaint, if such unjustifiable doses had not become the rule of the physiological school, and if such cases were not so frequent by reason of this ignorance of those things most worth knowing by the Therapeutist.

While Virchow, for example, in his inquiries upon the nature of constitutional syphilitic affections, rightfully maintains, against Lorinser, that, although upon the use of Iodide of potash, tertiary symptoms of syphilis disappeared, and, at the same time, Mercury was excreted with the urine, it does not hence follow at all that the Quicksilver, previously used, was the cause of those symptoms; he remarks, for the sake of an explanation thereof, among other things, "that the tissues, altered by syphilis, are more qualified, than others, to hold fast to the Quicksilver."

This contradiction demonstrates the possibility of being a clinical teacher without knowing Hahnemann's well known drug-provings of sixty years' standing; for, as it has been confirmed every day since that time, not only the tissues *changed* by syphilis, are more apt than others to hold fast to Quicksilver, but these tissues possess this aptitude when they have *not at all* been changed by syphilis, and that too, upon the basis of natural laws already detailed.

§. 127.

Just as the so-called secondary effects must become known by the art of observation, *by the differential diagnosis between* the amount of motion of morbid substances and curative substances, just so it must be in case of all drugs as regards the repetition of the dose. If we intend, for instance, in the scheme of Belladonna, nothing but a lasting depression of the pulse, then it is self-evident, that, when this depression is once reached, and not before, the dose, which produced this effect, ought not to be repeated till a pause, or rather the proportionally too early restoration of the frequency of the pulse, or its renewed increase announces itself; moreover, if we continue to administer the remedy without regarding this, we get at once other Belladonna symptoms, for which we did not seek, difficulty of swallowing, dilatation of the pupils, etc.

As regards the *quantity*, it hence holds good, according to *natural laws*, that, with a *changed quantity* of a dose of the same substance, a *changed quality* is always given, *as regards the organism*, although, naturally enough, not as regards the substance; and, as regards the effect, that, with every repetition of the dose, a *new primary effect* is produced at once in the sphere determined by the quality. If we water a plant as often as is necessary for its growth, it will not be injured. If we repeat this watering too often, it grows too luxuriantly, and perishes. This, however, is no secondary effect, but only the positive result of the primary effect too often introduced, of the unsuitable *repetition of the dose*.

§. 128.

THERAPEUTICAL SYSTEMS.

PHYSIOLOGICAL MEDICINE.

We can now, at last, proceed to submit to a correct judgment, the predominant systems of Pathology and Therapeutics, in order to learn what is true in them and what is false, for *knowledge* consists in perceptions and judgments together. And, if I choose, for this purpose, the statements of Prof. Wunderlich, it may be remarked, that, up to the present time, it is a matter of indifference which of the authors of the physiological school we permit to speak; for, since Hippocrates, everything within this circle has remained as of old.

According to Wunderlich, the end of *diagnosis* is to recognize, from the symptoms of a disease, the *anatomical* and *physiological* condition of the diseased organism.

This idea of diagnosis is a mistaken one; for only by this, that the pathological type of the form remains fixed in my memory, as the scheme of the *kind*, is it possible for me, on seeing a pneumonia, for instance, to recognize a *change* of this kind, as a new *predicate*, gained by experience, and not as a new subject. The physiological scheme simply and solely makes the differential diagnosis of a pathological scheme possible. Hence it is impossible, as Wunderlich will have it, for me to recognize, *from* symptoms of disease, a physiological condition. No, it is only possible, in the physiological condition, to observe a pathological, and accurately to measure it according to its quantity, quality, relation and modality. A physiological condition of the diseased organism is, and ever will be nonsense for diagnosis, as well as for prognosis. Both knowledges must contain

synthetic conclusions, both must be judged according to the fundamental maxims of experiment and observation.

The perfect *knowledge* of a thing I acquire by perception, by means of *synthetic* conclusions, but the *idea* thereof I obtain *analytically*, only by separating the [constituent] parts of the conception from the entire perception. If I analyze the physiological scheme of the organism, I obtain the idea of relative *health*. But if I analyze the idea of pneumonia, for instance, then this lies not within, but *without* the physiological scheme. I never find this pathological idea by an analysis or dismemberment of physiological life, because it is not at all contained therein. But I can connect the idea of pneumonia none the less with the physiological scheme of the organism, although it is not contained therein, if I adduce it by the law of causality as a *change*, and, by that of reciprocal action, as a *new form*, and hence, synthetically.

According to these fundamental propositions, all signs of diseases must be collected and measured, not arbitrarily and according to the accident of individual power of judgment, but in their difference, which they present among themselves, between the physiological appearance and its change.

To learn how far physiological medicine responds to these *logical* necessities, I select as an example, the most prominent, because it has been elaborated most completely by this school, that which is known under the collective name of inflammation of the lungs; for it is utterly impossible to form an idea of Homœopathy and its high worth, without the standard of comparison; since it is only by comparing the one scheme with the other, that we can rightly judge with regard to their different standpoints and conclusions, because even the ideas of Homœopathy, like geographical points upon the map, can only be determined and established out of the totality of their situation among other ideas.

§. 129.

Wunderlich expresses himself, regarding pneumonia, as follows:

“Pneumonia — inflammation of the lungs — occurs primarily and secondarily, sporadically and endemically; but seldom epidemically. *Primary* pneumonia is, next to Typhus, the most frequent severe acute disease, but secondary pneumonia occurs much oftener. Pneumonia attacks every age. The primary, although occurring in earlier years also, becomes, however, more frequent at the time of puberty, reaches its maximum between nineteen and twenty-three years of age,

is very common till thirty, then becomes much less frequent, but is more frequent again between fifty and sixty. *Secondary* pneumonia is especially frequent in the earliest days of childhood, up to the sixth year, and in the latter days of old age, and complicates, at these periods of life, the most severe diseases, but occurs also frequently in the middle period of life. The number of men attacked is considerably greater than that of women. All *constitutions* may be affected by it, but the robust, most frequently, while the anæmic, the cachetic, drinkers and pregnant women are not only frequently but also very severely attacked. A previous attack of pneumonia *predisposes to a return thereof*. Primary pneumonias are most frequent in April and May, then from December to March, then in June and September, the most seldom in July and August. The most dangerous pneumonias occur in August, June, October and March. The pneumonias of children and of old people occur most frequently in the cold seasons of the year, under a prevailing north and north-east wind. Secondary pneumonias are most frequent at the time in which the primary present themselves.

Pneumonia can be *directly* induced by local, thermal, mechanical and chemical influences; chilling and over-heating, shocks, wounds, the penetrating of foreign bodies into the lungs and bronchi—by immoderate bodily exertions, excesses, mental affections—by unknown epidemic influences. *Secondary* pneumonias are either *complicatory*, *i. e.*, they occur during the course of some other disease and merely complicate it, or *intercurrently*, especially in chronic diseases, also sometimes in long-continuing acute diseases—or *symptomatically*, where the pneumonia is but a partial phenomenon of a wide-spread disease, or, *metastatically*, whether with a complete disappearance of the primary disease (healing of an ulcer in the foot), or, in consequence of a secondary deposit of the products of the primary affection in the lung—or *alternating* (in Erysipelas, acute rheumatism) or *terminal* (extremely common).

Secondary pneumonia arises—by *topical extension*—by means of the blood (coagula torn loose or exudation-clots, pyæmia, cachexia) by long lying upon the back (Hypostasis), by new injurious influences *without special noticeable causes*."

§. 130.

The *anatomical* changes in pneumonia, which are worthy of note, concern, first of all, the very tissues of the lung which are affected. The entire lung, however, is never affected; the disease is always

limited to one or more portions, and sometimes only a small part of the lung is implicated.

In the affected part we find a deposit of a semi-solid substance, consisting of fibrine, water, albumen, blood-corpuscles, in various proportions of mixture, and a substance derived from the above mentioned deposits with which the vesicles of the lungs and the bronchial tubes are filled, and hence are more or less shut against the air, while sometimes the interstitial connective tissue may be, at the same time, infiltrated with them.

Great *differences* are, however, presented in the compositions of the exudations, in their degree of development, their distribution in the lung, and in the original quality of the tissue.

In the *purest* cases, in which the previously healthy lung is primarily affected, the exudation is a plasma, moderately mixed with blood, quickly coagulating, in which exudation-corpuscles early present themselves and, in favorable cases, a fatty degeneration begins at once (*croupous pneumonia, genuine pneumonia*). Here the lung presents, in the various periods of the disease, various appearances.

The beginning of the affection presents itself in the form of an intense swelling, without complete expulsion of air. The lung looks dark, is but little elastic, and, when cut, a bloody serous, tough, but not foamy, fluid oozes out. The tissue feels firm, crepitates under pressure little if any, sinks generally, yet slowly and incompletely, in water. The capillaries are overladen with blood-corpuscles, while the air in the vesicles is scanty, or quite lacking. By pressing or washing, the yet fluid contents of the vesicles can be separated, (splenization, inflammatory congestion, inflammatory infarction).

Subsequently the affected portion of the lung is swollen, sometimes appears even externally brighter, but generally darker, than the rest of the lung; the tissue is more compact, firmer, but at the same time soft and friable. Upon the cut surface, the affected portion of the lung appears of a brighter or darker brownish red, and the cut surface is granular; even upon firm pressure no bubbles of air come from the part, on the contrary, a tough, rust-brown fluid, consisting of blood-corpuscles, molecular masses, newly formed cells and a few small fibrinous clots.

In water, the piece of lung sinks at once; when dried, it shrivels up into a uniform hard crust; in this stage, the pulmonary cells and the smallest bronchi are filled with the soft, but mostly coagulated, exudation which clings closely to the walls of the pulmonary cells, and which cannot be removed by washing. The vessels of the part are compressed, sometimes occluded, with clots, and the part of the

lung is hence, more or less, lost to the circulation, and has become anaemic, (red *hepatization*, red softening). This condition is cured, either by absorption, or by throwing off the exudation. If neither cure nor death ensues, then the exudation may change into *purulent transformation*; the superficies of the part affected looks pale or yellow, the broken surface looks gray, grayish red or yellowish, often resembles the mixed color of granite; the tissue is moister again, and, by pressure, numerous reddish yellow fluid points can be pressed out, which contain pus-corpuscles, a few blood-corpuscles and abundant molecular masses. These contents can also be partially removed by washing, but without perfectly restoring the cell texture. The parenchyma of the lung itself is so broken down, that it tears on the least pressure. In more advanced cases even, a straw yellow pus exudes from the cut surface (*purulent infiltration*). The disease, arrived at this stage, may possibly be cured by expectoration; the fluid part of the exudation can only be removed by absorption. No doubt, in cases which recover, there is always, or almost always, a subsequent contraction of the lung.

It sometimes happens, finally, that the points of pus are changed into numerous abscesses which, however, occurs most commonly in *secondary pneumonia*, also in *traumatic* cases, in those following upon bloody infarctions, as well as after previous black-gray induration or upon *tuberculization* of the exudation. At the same time, there are a few abscesses present, in other cases more, and even quite a number, and these vary in size from that of a pea to that of a large apple. The abscess has, at first, no sharp limits, and loses itself in friable pneumonic tissue; somewhat later only, firm walls are formed about it, which, however, are generally uneven. The abscess may empty into a bronchus or into the pleura or even, upon agglutination of the folds of the pleura, it may open externally, or into the abdominal cavity and the organs contained therein. In favorable cases, the abscess may either thicken, or, after it has discharged, it may heal with a callous cicatrix."

§. 131.

"Very frequently the pneumonic exudations present more or less remarkable deviations as regards *quality*, and thus form transitions to other forms of disease. The chief of these are the following:

1. The *serous* pneumonia, a soft infiltration with a smooth surface, slightly granular or not at all; occurs chiefly in case of the *cachectic*,

the *aged*, and in secondary pneumonia, and runs into œdema by insensible transitions.

2. The *hæmorrhagic* pneumonia, in which the exudation is sometimes of a unusually dark color throughout, sometimes only in a few central nuclei; a form occurring in drunkards, in the *scorbutic*, sometimes in secondary pneumonias, but especially in *traumatic* cases, and forms the transition to infarction.

3. The *early softening* exudation almost forthwith leading to gray infiltration; observed chiefly in *pyæmic*, *marasmic* or *tuberculous* cases, and especially in some cases of *secondary* pneumonia.

4. The gelatinous-looking colloid infiltration, with the *chronic* form of the light gray callous induration connected therewith, occurs only to a limited extent, as a callous encystment of caverns or as foci of the size of nuts; it leads the way often to a tuberculous transformation.

5. The *black and blackish-gray induration*, sometimes present in great extent; sometimes over a whole tube even, or only enclosing other lesions with a smooth or even cut-surface; at one time, with swelling, at another with shriveling of the part, and with extremely firm consistence of the portion of the lung affected, which is entirely void of air. This condition may continue, without doubt, for years or may pass over into partial multiple suppuration, ichorization or tuberculization.

6. The *ichorous dissolving* infiltration, containing often stinking, abnormally formed pus-corpuscles and blood; ichorous pneumonia which, at one time, has only a limited extent, and, at another, spreads itself over a whole lobe, and then presents, usually, more or less numerous holes and cavities filled with ichor and is situated in an otherwise extremely soft part of the lungs; this presents a transition form into gangrene and occurs under similar conditions.

7. *Carcinomatous* infiltration, which occurs in cancerous individuals."

§. 132.

"As regards the *seat* and the *manner of distribution* of pneumonia, the following distinctions are to be made:

1. *Lobar* pneumonia, in which the affection is connectedly spread over a greater part of the lung; it occurs, most frequently, in the primary form but, often, also, in secondary cases; it occurs, most frequently, in a lower lobe, and in the right side somewhat oftener than in the left; more rarely in an upper lobe, in which case a transition into tuberculization readily occurs; *sometimes* in the right middle

lobe—at *others* in the central; in *a few cases* it is spread over the whole lung, or, at least over the greatest part of it, (generally, neglected pneumonia) in both lower lobes (*rather rare*) in both upper lobes (likewise rare); in an upper lobe on one side and a lower lobe on the other; crossed pneumonia (not unfrequent); sometimes advancing step by step; sometimes changing places, *erratic*; in secondary pneumonia, often in the lowest most posterior parts—hypostatic.

2. The *reactive* pneumonia, located about another diseased centre, in greater or less extent, sometimes subsequently affecting the whole lobe, and especially predisposing to induration.

3. *Lobular pneumonia* in *a few* or many isolated lobules of the size of a cherry stone or a walnut; generally in both lungs, at a time; oftener in secondary (occurring, for instance, in pyæmia, exanthems, or after bronchitis) than in primary pneumonia; more frequent in little children, than with adults. When the course of the disease is prolonged, the interjacent parts of the lungs become afterwards affected, in which case, the parts first affected, may be recognized by their different appearance; generalized lobular pneumonia.

4. *Marginal pneumonia*, where only groups of cells are affected, especially in children, the tuberculous and cachectic.

5. *Interstitial pneumonia*, chiefly an affection of the connective cell-substance, and ending either in induration and obliteration, with the production of a very firm callus at the same time, after progressing slowly, from place to place, or as a dissecting abscess (extremely rare).

6. *Interlobular pneumonia*, with deposits between the lobules of the lungs (extremely rare in man).

Essential *differences* arise, according to the variety of the former state of the lungs.

Pneumonias in the fetal state are rare; they produce white, firm infiltrations, or red lobar hepatizations.

Pneumonias of the *new born* present themselves in the form of lobar hepatization, or of diffuse abscess.

Pneumonias in *children*, up to the fifth year, are by far the most frequently lobular and disseminated, but often become generalized afterwards.

In *youth* and middle age, the primary pneumonia is most completely formed.

In *old age*, simple infiltrations (stases) partly take place, partly granulated forms with red and gray hepatization, often by preference in the upper lobes, and generally with imperfect expulsion of air, or finally smooth, not granular forms (serous pneumonia).

In simple *anæmic* lungs the hepatization remains, for the most part, circumscribed, and is marked off by a very sharp border, from the remaining lung-tissue, which is extremely pale and acutely emphysematous. The exudation is tough and like bloody water.

In *compressed* lobes of the lungs, under recent pneumonic infiltrations, the parts are inelastic, shriveled, but tolerably firm and less decayed, pale, light brown or livid, and the granulations are not well marked. In case of old infiltrations, the tissue is tough, moderately hard, and poor in blood.

Emphysematous lungs, when attacked with inflammation, present a coarse-grained and irregular granular appearance, and there are often portions of lung unaffected, in the midst of the hepatization.

In *tuberculous* lungs we most frequently see the granular, lobar and lobular infiltration with disposition to tuberculization, and early bleaching; furthermore, gelatinous infiltration of the small portions; black induration; vesicular and interstitial induration."

§. 133.

"*The other parts of the respiratory organs* generally present changes during pneumonia. The lung *not* affected by pneumonia, is, at one time, hyperæmic, at another anæmic, very often œdematous, and, in patches, emphysematous; other accidental complications may also be present. The *bronchi* are more or less reddened, generally somewhat dilated, containing a tough, reddish fluid, and sometimes coagula; at a later period, the mucous membrane is often bleached, and the contents purulent; sometimes in the bronchi firm coagula are found, or they are filled with a very copious sero-purulent fluid.

The *larynx* is, at times, affected simultaneously in the form of catarrh, of hyperæmia, or a moderate croupous inflammation.

The *bronchial glands*, especially with children, sometimes even with adults, are swollen, brown red, often softened and sometimes containing pus. The smaller arteries of the lungs, and even the veins, are frequently filled with clots. Upon the pleura, thin layers of plastic exudation almost always lie; sometimes, even, a more abundant exudation is found. In case of children, and old men, the accompanying pleuritis is less frequently seen.

In primary croupous pneumonia, the blood always shows a considerable increase in the fibrine, becoming greater in the course of the disease, forming a thick, firm crust, and strongly contracted coagula. The white blood-corpuscles, as well as the fat, are increased, the amount of albumen is inconstant, the proportion of salt diminished.

In the brain, are sometimes found sub-arachnoideal, salty, or purulent exudations; effusions into the ventricles are more rare; hyperæmiæ are frequently observed; on the contrary, in the venous sinuses, and, in the great veins of the pia mater, there are usually tough, firm, fibrinous clots.

The *heart*, especially in its right division, usually presents firm fibrinous clots, and sometimes, also, the complication of pericarditis.

Catarrh of the stomach, and, with little children, softening of the stomach are not uncommon; the liver is often found in a state of congestion; the spleen is generally firm and contracted. The kidneys present, frequently, at one time, only a moderate, at another a deeper-seated affection, hyperæmia; diffuse, more rarely circumscribed infiltrations, and frequently catarrh of the tubuli and pelvis of the kidneys.

Pneumonia may be entirely *latent*, whether from a limitation of the process to a very small section of the lung, or to many small scattered spots; or, on account of a complication with other disturbances of the thoracic organs, which conceal the local indications of pneumonia.

In many cases of pneumonic infiltration, this [the infiltration] is *not recognized*, because the local examination of the lung is neglected; so, especially in frequent cases, where pneumonia sets in, in course of other diseases, and often where the state of the patient does not well admit of a daily exact examination of the chest.

In some cases of pneumonia there are, indeed, local phenomena of disease, *but these may just as correctly be referred to other lesions*, or they may be of doubtful significance.

In yet other cases, sufficiently clear local symptoms are *lacking*, but the accompanying and general symptoms are of such a kind as to make the existence of pneumonia at least probable."

§. 134.

"The *most positive momenta* for the *diagnosis* of pneumonia are:

"The *characteristic expectoration* of brick-red or yellow color, of a tenacious consistency, intermixed with blood, sometimes foamy, but, with air-bubbles becoming smaller and smaller, and finally ceasing altogether, frequently with soft bronchial clots. This expectoration becomes changed subsequently, sometimes is transformed into the usual catarrhal sputa, with disappearance of the blood, or becomes like prune-juice or purulent, and frequently milk-like streaks are to be seen in it, instead of the previous bronchial coagula.

The *phenomena presented under percussion*, which presuppose that a sufficiently large part of the lung is affected with infiltration, and

that it is near the periphery of the lung, and that no considerable pleuritic exudation is present near by. At first, the sound is somewhat shorter or tympanitic, subsequently it is more or less muffled, but generally without a distinct line of demarcation between the diseased and the normal portion of the lung. During the resolution of pneumonia, the sound is often tympanitic again. In the transition to chronic induration, the muffled sound remains. When caverns are formed, and their contents are discharged into the bronchi, the sound is tympanitic, and sometimes even has a metallic ring.

The auscultatory phenomena. These presuppose that the pneumonic spot is not too far from the outer surface of the lung, and that the bronchi are not quite obliterated by firm clots. In the first period, the vesicular respiration is frequently rough and sharpened; afterwards, a fine uniform crepitation ensues; sometimes, where there is wide-spread and complete infiltration of part of a lung, the respiration is bronchial, and at the same time, usually very loud. During retrocession, the respiration frequently begins to be crepitating again at the edge of the infiltration. In purulent degeneration, harsh and consonant râles are heard. These symptoms, however, are frequently concealed or mingled with bronchial whistling, the râle accompanying the œdemata, with the creaking of pleuritic exudations, or even with yet other complications in the lung.

The type of the fever, which, however, only presents itself characteristically in primary pneumonia, *i. e.*, as a continuous fever, lasting for many days, otherwise with very slight and irregular remissions, and with a rapid defervescence when the infiltration is complete."

§. 135.

"Symptoms of *proximate value* are the type of the *breathing*, an accelerated short and superficial, in severe cases, unrhythmic respiration, which chiefly occurs with force in those parts in which the pneumonic infiltration does not occur, and is usually accompanied by a characteristic movement of the *alæ nasi*; the interrupted speech is usually more observed in pneumonia than in other affections of the lungs; the appearance of a herpes about the mouth and nose in the course of a violent, feverish, not intermittent attack.

Besides these phenomena, others are often present in greater or less number; *pains*, which occur sometimes spontaneously, at other times, from change of position, speaking, coughing, but which, perhaps, rather belong to an incipient pleurisy, than to a pneumonia, and frequently are observed in remote points, rather than in the parts

affected; these are usually an early symptom of infiltration, but generally disappear long before its resolution; the *sensation* of an unpleasant warmth upon the chest; of fulness, of pressure, of motion, of anxiety; *cough*, which, however, is wanting in not a few cases, especially in the beginning, sometimes during the entire course, and in no manner presents a peculiar character. The *color of the face*, that is the deep and sharply defined redness of one or both cheeks, the livor of the lips, and also of the rest of the face; subsequently, sometimes, a yellowish color of the skin, the anxious expression of the physiognomy in the later periods of severe cases, and the cachectic pale color of the face under the same circumstances; frequent *head-aches*, *sleeplessness* or else *drowsiness* and stupor, sometimes *delirium*; these chiefly occur in children, women, old people, topers, in case of pneumonia in the upper lobes, and in such as are combined with more severe intestinal affections; *the accelerated stroke of the heart and the hardness of the pulse*; more or less severe symptoms pertaining to the intestinal canal; *loss of appetite*, various *coatings upon the tongue*, vomiting, especially at the invasion of the disease, *constipation*, seldom diarrhœa; changes of the *urine*, which becomes more scanty, contains much red pigment, is considerably concentrated, even albuminous and mixed with blood, and sometimes presents traces of constituents of the bile; the combinations with chlorine are diminished, or even disappear entirely, quite frequently; especially in favorable cases, a marked sediment of urates is present; *hæmorrhages*, especially nose-bleed, less often hæmaturia or petechiæ."

§. 136.

"The *grouping of symptoms* and their *course*, present, according to the nature, character, etc., of pneumonia *an infinite variety*. The primary simple croupous pneumonia of the lower lobe, in an adult, previously healthy, presents the most characteristic type.

The disease generally begins in the midst of health, or after scarcely noticeable premonitions, with a violent chill, followed by great heat, mostly dry, sharply circumscribed redness of the cheek, hardness of the pulse which is of medium frequency, sometimes thirst, entire loss of appetite and entire inability to keep on one's feet any longer; with this, either from the very outset, or, on the next day, chest-symptoms appear; cough, which is short and convulsive, but may even be wanting, sometimes accompanied from the first with bloody expectoration, interrupted speech, frequent respiration, stitches in the side. On percussing, on the posterior part of the affected side, the corresponding

modifications of sound are apparent, seldom on the first day, generally on the second or third, seldom later. In the same place, and at the same time, the changes of the respiratory sounds are noticed. Generally, with the second day, the expectoration, on account of blood being intimately mixed with tough excretions, appears of a yellowish or brick-dust color. The functions of the brain are but little changed, yet there is frequently headache and restlessness at night. The strength is broken, without a marked sensation of weakness. The chlorides are notably diminished in the urine which is of a deep tinge and less in quantity.

In a tolerably uniform continuous course the disease proceeds thus, through several days. In *favorable* cases, the pulse rises but little over one hundred, the temperature not above 32° , the respirations not above forty in the minute. In such cases a Herpes generally soon appears; the lips become a little livid only, and all dangerous symptoms are absent. The fever declines often after a previous exacerbation, most frequently about the fifth day, seldom later than the seventh, with a rapid defervescence, so that within from twenty-four to thirty-six hours, the temperature returns to its normal standard, and the pulse quite as rapidly sinks to its normal frequency. With this termination of the fever, the patient becomes quiet, feels relatively well, and, from that period, the blood disappears from the sputa and resolution of the infiltration in the lung begins, which, in *favorable* cases, is complete in from three to fourteen days."

§. 137.

"*Deviations of pneumonia from this course* may be produced by the kind of development of the local process, and of the type of the course of the entire disease, by the seat of the pneumonia and the kind of exudation, by modifications of the entire organism, and, by complications; finally by transmutations of the process.

In the *type of the course* the following deviations present themselves: Unusually slight, or entire absence of, fever, with perfectly developed local phenomena (extremely rare); uncommonly early completion of hepatization in connection with a prompt recovery, or, of a tardy healing, (very seldom); retarded formation of the local changes, associated at the beginning with violent fever, in which case the diagnosis is possible only after some days; unusually violent development of the fever and an adynamic type of the same (typhoid form); infiltrations with local successive additions thereto, pneumonias successively completing themselves, mostly, with a simultaneous removal of the

fever; progressive extension of the infiltration, erratic pneumonia: sometimes with paroxysmal advances, (pneumonia advancing *per saltum*); alternate attacks of various parts of the lungs after the manner of erratic erysipelas (*erratic pneumonia*); *rhythmically inter-mitting pneumonia*.

As regards the *seat of pneumonia*, that of the left lung sometimes produces more violent phenomena on account of the heart; that of the right lung, phenomena on account of the liver and from retention of the bile; pneumonias of the upper lobe frequently produce very violent fever-symptoms, very acute delirium and other affections of the brain, sometimes typhoid symptoms, and they not infrequently proceed to incomplete resolution and tuberculosis; infiltrations of an entire lung, or crossed pneumonias are marked by violence of the symptoms and by dyspnœa, generally, also by a protracted course; lobular, vesicular and hypostatic pneumonias are seldom primary in adults, and, when they appear, have the character of secondary pneumonias."

§. 138.

"Differences according to the *kind of exudation*. Serous pneumonia present no sputa, or, foamy-bloody-serous, partly pure serous sputa, which are raised with difficulty; an imperfect, often tympanitic dullness, extensive, fine crepitant râles, generally without, or, with incomplete, bronchial respiration; dyspnœa at one time severe, at another slight; frequently slight fever; utter irregularity in the beginning, course and termination of the disease, which is frequently connected with œdematous swelling of the face and the extremities.

Hæmorrhagic pneumonia is characterized by a more copious and purer bloody expectoration, by extreme pallor of the countenance and often by a cachectic color, by phenomena of extensive hæmorrhagic diathesis, by great debility and *inclination to collapse*, by a lack of agreement between the local and febrile symptoms, and chiefly by extreme slowness of the course of the disease.

The acute purulent pneumonia is not to be distinguished, during life, unless a large abscess discharges itself, in which case, the topical symptoms correspond with those of the chronic abscess.

Ichorous pneumonia is marked by the *greasy*, discolored, stinking character of the expectoration, sometimes by intercurrent hæmorrhages, by violent fever with early prostration and *inclination to collapse*, by excessive sweat and *disposition to colliquative diarrhœa*, by a cachectic look, by its protracted course, *generally ending in death*, or

recovery with an extremely tedious and frequently interrupted convalescence."

§. 139.

"Differences according to various ages. The pneumonia of the new-born occurs sometimes primarily, at others in consequence of other diseases; has generally a short course and leads rapidly to diffuse hepatization. Oppressed respiration, heat of the skin and accelerated pulse, sometimes some cough; laborious respiration with the alae nasi and the lateral portions of the thorax; suppressed, short cries, pallor and livor of the face are the most important symptoms beside the local. Often the diagnosis is still further obscured by vomiting, meteorism and diarrhœa. This, mostly fatal, affliction, lasts only one or a few days.

During the *period of nursing* and up to the second dentition pneumonias occur in a threefold form.

They either follow a catarrh, or occur in course of another acute disease; are lobular and become general somewhat later. The disease begins with catarrhal symptoms, which, at first, are of slight importance; then exacerbation with chills and rapid increase of heat; rapidly increasing dyspnœa and frequency of pulse with a sickly and anxious expression, hot, red or pale head; sometimes there is great excitement, at others a more soporous condition. Auscultation reveals crepitation, whistling, only exceptionally bronchial respiration; percussion sometimes dull. If the symptoms do not moderate soon, the face assumes a livid pallor, the pulse becomes extremely frequent and *death* may ensue in the first few days. If the disease early takes a turn for the *better*, the cough becomes looser again, the respiration freer, yet attacks of suffocation readily recur, and, although the state of affairs has continued to be a tolerable one for several days, may suddenly take a new turn towards a *fatal termination*. Besides, the development of children is retarded in most cases of this disease, or scrofula sets in, or rhachitis and other chronic diseases of children.

A second kind of pneumonia is lobar from the outset; usually begins with vomiting, and resembles more the pneumonia of adults. The prognosis is more *favorable*.

The third form is that of cachectic pneumonia, occurring in the course of chronic diseases; beginning unnoticed, it runs its course very much without symptoms, announcing itself by the local physical signs, and the great prostration of the children, and usually ending in *death*.

After the second dentition, the pneumonias of children are more similar to those of adults, and distinguish themselves only by the far more frequent occurrence of vomiting, at the very invasion of the disease, by the extremely violent fever, and the unusual frequency of the pulse, by the *tendency to cerebral complications*, by the usual lack of expectoration or swallowing of the same, by the disposition to salutary nose-bleed, and by the *greater danger of consecutive diseases*.

The pneumonia of *old people* usually begins suddenly with a chill, and takes a course similar to that of the pneumonia of middle-aged people, but with greater prostration, inclination to sopor, quiet delirium and a dry tongue. A *tracheal rattle* often puts *an end to the life*, even where other conditions are favorable.

In other cases the pneumonia of the aged begins with symptoms of the head, great prostration, difficulty of swallowing, vomiting, diarrhœa and other intestinal symptoms; after a few days *sopor* ensues, followed by a *fatal termination*.

In many cases, especially with very old people, there are no subjective and functional symptoms at all; *death approaches almost imperceptibly*, and, as if from the senile marasmus, frequently after but few hours of soporous sleep, nevertheless, in such cases, a whole lung may be hepatized or affected with purulent infiltration.

The pneumonias of old people are always more *dangerous* by reason of the tendency to cerebral complications, to severe intestinal symptoms, to collapse, to *retention of the sputa*, producing *suffocation with tracheal rattle*"

§. 140.

Secondary and complicated pneumonias may follow in their course that of primary pneumonia pretty closely; in other cases they present more or less marked differences, which chiefly consist in the following: Sometimes, indeed, they are extended over one lobe, but much oftener are lobular, vesicular and hypostatic. Their beginning is frequently hidden, the chill is usually wanting and the development of this severe affection of the lungs is frequently indicated by no conspicuous symptom.

The fever is more violent, and frequently assumes the ataxic or a dynamic form; the fever, however, is often slight, and even is altogether lacking. If the primary disease has run its course with fever, then this may be aggravated by the access of the pneumonia, or its type may be modified.

The local, subjective and functional phenomena are often slight, or are entirely wanting; the dyspnœa, however, is seldom absent.

The chief *local complications* producing disturbance in the course of the disease are as follows:

Broncho-pneumonia, which prevails partly epidemically and endemically, and is partly produced by peculiar dispositions; in adults it is sometimes lobular, and generally so with children; in one case it begins at the same time in the bronchi and lungs; in another the pneumonia follows a bronchial catarrh. *The initial chill* is frequently *lacking*, while, on the other hand, the cough is more severe and spasmodic; sibilant and purring râles are heard in the chest, dyspnœa is more marked, livor sets in early, and the danger of the access of œdema, or the transition of the gray hepatization is greater.

Bronchitis may also set in, during the course of the disease, by which the dyspnœa is aggravated, the abatement of the fever delayed, and *tubercularization favored*. Pleurisy of both sides at the same time [is another complication], by which the pneumonia becomes more painful; the sound on percussion more dull; the vibration of the voice diminished; the diagnosis rendered difficult, and a rapid deorvescence *frustrated*.

Contemporaneous pleurisy of the opposite side, by which the dyspnœa is much increased, and the whole course of the disease is rendered more violent.

Extensive œdema of the lungs, by which the dyspnœa is increased and rapidly rises to a *dangerous* height; moist râles and a copious foamy expectoration; not unfrequently, also, a sudden retention of the expectoration is induced, with livor and symptoms of suffocation, thus frequently inducing a *fatal issue*.

Acute emphysema, which may simulate the rise of a wide-spread hepatization by the arching out of separate portions, with, at first, a tympanitic sound, gradually becoming short, which increases the dyspnœa, produces a livid countenance and contributes to a *fatal termination*. Clots in the vessels of the lungs, and, in the cavity of the heart, with sudden attack of suffocating dyspnœa, with danger of a rapidly *fatal termination*, or the invasion of œdema of the lungs, or mortification. The complication with *nervous* and *cerebral* irritation, which mingles its symptoms with those of pneumonia in all degrees of excitement, even up to raving delirium, and which often makes itself most severely felt only after pneumonia has run through its course, and which may even go on to a rapidly *fatal collapse*.

Pneumonia, occurring in the first stage of *tuberculosis*, is occasionally to be distinguished from a primary pneumonia, only it does not

define itself usually in a well marked manner, and partially passes over into tuberculization. The more advanced the stage of phthisis is, and the more extensive the pneumonia, the less characteristic are the general symptoms, and only the physical signs are decisive of its presence.

The accession of a true *meningitis*, of a *pericarditis* and an *endocarditis*, or an *affection of the liver*, complicates the pneumonia in a corresponding manner.

Pneumonia may also become associated with various acute and chronic diseases of the brain, in which case it takes quite a latent course, and, even with patients who are not confined to bed, extends over a very great portion of the lung, and may suddenly, as it seems, prove fatal.

The access of a severe gastric and intestinal catarrh, may, by the addition of *gastric symptoms*, and by the greater prostration and tendency to delirium and sopor, which are usually present at the same time, present the appearance of a typhoid fever.

Moderate *hæmorrhages from the nose and uterus*, during the course of the disease, are *favorable*; more copious discharges of blood may give the fever an adynamic character, and induce *collapse*.

Nephritis with albuminuria, frequently occurs, embarrasses the course of the pneumonia, favors the production of œdema, sometimes occasions severe symptoms of the brain and great prostration, and contributes to a *fatal termination*."

§. 141.

"Of pneumonia with *constitutional disorders*, those are of chief importance which occur in course of *acute exanthemata*, which are frequently lobular, often are but little marked by local phenomena, but induce an aggravation of the fever and of cerebral symptoms.

With *typhus* fever, a similar relation may obtain as in case of exanthemata, or, with the invasion of pneumonia, the character of the disease may completely change.

Pneumonia is frequent with drunkards, and dangerous from an impending collapse, from the probability of a delirious sopor and the invasion of active delirium, from the tendency to the transition of the exudation into *ichorous ulceration*.

Pneumonias as a result of purulent poisoning of the blood, are *without symptoms*, as no large abscesses are formed, except that they frequently induce dyspnœa; they lead to a *fatal termination*.

Pneumonias, occurring in course of chronic dyscrasiæ, are characterized by few manifest symptoms; fever sets in, or if already present, it becomes continuous, and more violent, and *death often occurs unexpectedly.*

With anæmic subjects, pneumonias do not become so wide spread, but are *marked* by violent fever and dyspnœa, by adynamia and the danger of a *rapidly fatal termination.*"

§. 142.

"*Chronic pneumonia* is sometimes an isolated process, partly in cases where a portion of the lung, after an acute inflammation, remains indurated, or where an abscess follows, partly in cases where the whole process develops itself insidiously and with little demonstration. Moreover, chronic pneumonias very frequently occur as concomitant phenomena of other pulmonary and constitutional diseases.

The changes in chronic pneumonias are, simple induration, chronic abscess, dark and gray induration with or without the formation of abscesses, gelatinous infiltration and grayish white induration, chronic ichorous pneumonia, generally with several suppurating centres, [Destructionsherden].

The local physical phenomena present no peculiarity, except *their long continuance*, and the confounding of this state with tubercle and pleuritic exudations is, above all, a frequent occurrence. The expectoration may be entirely wanting in chronic pneumonia, or it may be purulent, ichorous, bloody, or insignificant. The cough is at one time continuous, at another present but for a short time; now moderate, now spasmodic and tormenting. General phenomena may be lacking altogether, or a more or less violent fever, with a continuous febrile type or hectic character, may lead the way, by slow or rapid strides, to *consumption*. Generally a cachectic look, an icteric or livid color, œdematous swellings, or a diffused dropsy are present. The course of chronic pneumonia is more or less tedious, and admits of many fluctuations, and gives reason to anticipate even the *establishment of a tolerable state of health.*"

§. 143.

"Pneumonia may terminate *in complete recovery*, as is generally the case in the primary croupous pneumonia of youth and middle age, when the disease is limited to one side, where there are no com-

plications and the patient has good care; with other kinds of pneumonia, this happens much more rarely.

The termination in acute *sequelæ* is seldom, and then chiefly in œdema of the lungs, gangrene of the lungs, acute tuberculosis, pleurisy, pericarditis, œdema of the glottis, meningitis, parotitis, pyæmia, acute infiltration into the kidneys. Frequently the disease assumes the form of chronic inflammation either of the lungs themselves, or of neighboring or remote parts.

Death may ensue from extension of the hepatization under cyanotic and suffocating symptoms—by the rapid development of the pneumonia into gray softening, purulent infiltration, or ichorous ulceration with symptoms of a nervous, adynamic fever; by the occurrence of additional lesions in the lungs, as severe hyperæmia of parts of the lungs not affected, emphysema, œdema, hæmorrhages, coagulation of blood, plugging of the bronchi, swelling of the bronchial glands; by consumption or sudden exhaustion in consequence of violent fever and irritation of the brain, by manifold complications, by subsequent diseases.”

§. 144.

In view of this quotation, we cannot comply with the requisition of Wunderlich, to learn the *physiological* condition of the organism sick with pneumonia, from the symptoms of the disease, because the physiological condition of a diseased organism is a *contradictio in adjecto*. But we may well compare the physiological condition of a man *with his pathological*, when in disease.

Since, now, the general mark of the correctness of a division, is given in the relation of contrast, which presents a sufficient guarantee of a complete exhaustion of the idea, and excludes *co-ordinate ideas*; so also *anatomical* changes in diseases, cannot be the correct principle of division, for it can contain no variation as regards quality, and no division according to further diagnostic momenta. The variations in the course of the disease, however, and in various ages, are as much *co-ordinated* with the idea of pneumonia as the idea of the secondary, complicated, and chronic pneumonia. Least of all can pneumonias, with constitutional diseases, and the changes thereby occurring in other organs, be arranged under this anatomical rubric.

Moreover, a certain number of possible cases is enumerated, it is true, *but the knowledge of all cases of pneumonia*, or even a glance at them, is utterly lacking, and, in this method, is impossible. Hence there

must be another principle of division for diseases, in order to be able to establish a correct diagnosis, prognosis, and indication, which Homœopathy alone possesses, in the comparison with the phenomena of disease, made possible to it by its drug-provings.

On the other hand, the frequent relative ideas, seldom, frequently, especially, chiefly, sometimes, but often, also, mostly, etc., etc., indicate the standpoint of *incomplete induction* in this quotation.

Again, we can find [in the above quotation] nothing of a generality upon which, of necessity, all the specialities of a disease must rest; hence, any decision, with a view to a thorough explanation of the data presented, must be postponed; a dangerous matter for the formation of correct rational diagnoses, prognoses, and indication.

§. 145.

The above-given *description* of pneumonia is thus purely analytical, and hence shows the impossibility of being comprehensive by giving descriptions of forms of disease. We shall, hereafter, undertake to prove, not only that it is incomplete, but that indeed it cannot be made complete, and why.

But, if *one* only of the many so-called physiological forms of inflammation of the lungs were described perfectly, then more justice at least would have been done to the name of a physiological medicine. But so little do we meet with any description whatever of a special case, that, on the contrary, the most manifold dismemberment of those phenomena which, at times, are common to the most different specific forms of pneumonia, had to assist in establishing the idea of pneumonia. Most unhappily, however, *i. e.*, most unscientifically chosen with regard to diagnosis, is the division into most trustworthy and approximately trustworthy phenomena. Hence, according to this, there are no trustworthy phenomena. Both are separated, not by specific differences, but by arbitrary views. If parts of approximately trustworthy phenomena appear in company with those which are most trustworthy, then they construct thereby the given case and determine its peculiar kind, its specific form in connection with constitution, age, sex, anatomical changes and qualitative forms and processes, the sympathy of other organs, the type and course, and the ætiological momenta according to time, place, circumstances, etc.

But every author chooses another mode of description, according to his own stand-point, as farmers divide plants into weeds and useful vegetables, but the botanist into mono- and di-cotyledons.

If these gentlemen assert themselves to be so physiological, affixing, as they do, this seal to their foreheads, why are they not physiological also in their practice?

We seek in vain, in the whole description of the ætiology and the forms of pneumonia for a relation of cause and effect, of the whole to the parts or of the equality of effect and counter-effect; not once do we hear of the difference between that which may recover or be cured, *i. e.*, the reasons thereof, and the *prognosis* would hence only be determined by the arbitrarily assumed degree "of the character of the danger," on which account we find the prognosis to be combined, *brevi manu*, with the symptoms.

But how shall we thus come to find a connection of these data with a *curative remedy*? By the enumeration of disconnected characteristics, by incomplete definitions, absolutely nothing is gained for Therapy, if no *deduction* is connected therewith, the very thing that is lacking. If it were present, however, those arbitrary divisions, amounting to nothing, would be perfectly superfluous, for the question would always turn then about the *specific* case given. But this is a conception so colossal, for the ideas of the physiological school, one so far surpassing its ideas of the subject, that it can never understand it.

§. 146.

Thus, with this description of inflammation of the lungs, a few data, from the many which may be found in special cases, are crowded together into a *general analytic resumé*. No man is able to abstract therefrom, even a single *special form*, under which a case here or there, to-day or to-morrow may appear.

Hence, since all diseases, in works upon the so-called *special* pathology and therapeutics, are treated in this manner, we have to do, not with specialties, but with *generalizations*, which are a satire upon their title.

A *special* pathology and therapeia should have either to enumerate *all special forms* of pneumonia that can possibly occur, and have already occurred, with their whole ætiology and symptoms, or give the *laws*, synthetically, to which one or the other species is subordinate. But the combinations of ætiological and disposing momenta, of intensities and stages, etc., under which pneumonia may occur, are *endless*, and the species, thence arising, hardly to be comprised even in an *historic* treatise.

Hence, under the title of special Pathology and Therapeutics, nothing is ever presented but an extremely *general* pathology and therapeutics.

Formerly, under *general* pathology and therapeutics, were enumerated the ætiological and predisposing momenta, the definitions of fever, with its forms and stages; definition of inflammation, etc. All these, because they were inseparable, were subsequently drawn into the domain of the so-called special pathology and therapeutics, which now, with few exceptions, in reality occupy the place of the general.

Hence, that description of pneumonia contains so general an outline, that no one can establish an essential, or even a causal indication, but only a symptomatic, and this only in regard to single complexes of symptoms separated from the disease in its totality.

There must be a possibility, however, of synthetically *comparing*, in the symptoms, the differences between the influences of the pathological and those of the therapeutical causes to be employed; hence the conditions must be at hand for our being able to make use of a synthetical method, even for a therapeutical purpose, a possibility for which, however, is lost by such descriptions of disease, and a rational indication, conformable to natural laws, or a differential diagnosis of these differences even, becomes impossible.

Upon the whole, the enumeration of symptoms, which may be predicted of a pneumonia, in this description just quoted, is tolerably complete; at least given fully enough, to lead us, in all fairness, to look for a very comprehensive therapeia to which I proceed, in my quotation in the next paragraph, with the remark, that the illustrations of the quotation touching pneumonia are by no means concluded herewith. They will serve, hereafter, for a comparison with the pathology of pneumonia which is taught by the two other schools; *for we can, as has been said, test nothing by itself, but only by some other thing.*

With this description of pneumonia, the same author lays down the following therapeutics:

§. 147.

“Therapeutics of pneumonia. In the croupous pneumonia of adults, warm compresses, sinapisms upon the chest, relieve the dyspnoea, sometimes the pains, etc.

The use of general blood-letting, where the disease begins with violence in powerful subjects, is frequently useful in a high degree in the first two days, and almost always in the following days; useful at least in shortening the course of the disease; it is very beneficial for dyspnoea, and often for the pain, and the general restlessness; it is indicated. at any time, by a marked hyperæmic condition of those parts of the lungs which are not the seat of the inflammation; local

blood-letting upon the chest, by cups and leeches, is of less certain and complete effect as regards shortening the disease than general bleeding, but is almost certainly harmless, and very useful for the dyspnœa and the pain; the nitrates have but little effect in shortening the course of the disease, but some in moderating it; nauseating remedies, Tartar Emetic, the Sulphuret of Antimony or Ipecac, in small doses, operate similarly to Nitrum, and are at the same time beneficial for dyspnœa, in case of impacted expectoration, the sputa being lodged in the bronchi, and in nervous excitement; a single use of an emetic, where the bronchi, and the lungs are filled up with secretions, is of the greatest advantage. The methodic use of Tartarized Antimony, in large doses, is very effectual in shortening and moderating the course of the disease.

The methodic use of Ipecac, in large doses, has an effect similar to that of the Tartarized Antimony, but is more appropriate for weakly subjects and for such as have a tendency to diarrhœa. The Salts of Copper and Calomel are of doubtful effect; Digitalis in large doses, while it is probably without effect in shortening the disease, is, on the other hand, of use perhaps in moderating it, and, securing at any rate, the decisiveness and continuance of the spontaneous defervescence. Opium is useful for dyspnœa, spasmodic cough, and nervous restlessness. Inhalations of Chloroform are of use for the dyspnœa and spasmodic cough, but probably without effect in shortening the course of the disease.

Special treatment for single accessory symptoms, is only exceptionally necessary in the course of the febrile period in simple croupous pneumonia of adults; against severe cerebral complications, cold applications, and, according to circumstances, local blood-letting or narcotics; against violent hæmorrhage, Sulphuric acid and Digitalis, *Secale cornutum*, even bags of ice; sometimes, against the sudden impaction of the sputa with great dyspnœa, an emetic; against obstinate vomiting, Laurel water, Carbonic acid, Opium; against constipation continuing more than two days, *Enemata*; against diarrhœa, mucilaginous remedies, Opium, warm cataplasms.

If the favorable crisis delays beyond the seventh day; or if, earlier even, unfavorable symptoms set in, as increasing fever, brownish sputa; if infiltration has extended over an entire lung or even over a great part of both lungs, if collapse has set in, the face is pale, icteric, cyanotic, if the dyspnœa becomes more and more severe, the pulse small and very frequent, if violent cerebral symptoms are present, or, if the case is presented in any of these conditions, then no great hopes can any longer attach to the treatment, although, even in such cases,

and even in those apparently the most desperate, now and then, recovery ensues.

In this stage of pneumonia we should, first of all, consider whether we have to deal with an individual originally vigorous, or with one weakly, more or less anæmic or marasmic even, for, upon such conditions, the essential danger presumptively depends. Accordingly, the therapy varies very much, and the following very diverse and very heroic methods may become useful: General blood-letting, topical blood-letting, emetics, benzoe flowers, camphor, quinine. Aside from these milder and merely supporting remedies, we may call to our aid, warm poultices, sinapisms, dry cupping, blisters, sal-ammoniac, mild preparations of antimony, senega, myrrh, small doses of narcotic remedies, warm baths.

The right choice of the method to be used is, in these cases, not easy, and it may well happen that by erroneously laying the chief stress upon less essential points, a *false treatment may be taken up*. As soon as the fever is moderated, or the pneumonic infiltration ceases to extend further, it is prudent to make no more attacks upon the disease, but, on the contrary, to continue the medicines already given, but in smaller and less frequent doses.

They must be discontinued, only when the favorable crisis makes rapid progress, or, if, after gradual progress, the completion of the crisis is near at hand, or, if the remedies produce undesirable concomitant effects.

After the completion of the defervescence, it is merely required to furnish proper food, but no particular treatment is any longer needful. However, this has to be recurred to in case of intervening collapse; during protracted decline of the fever, camphor may be used; for insufficient expectoration, sal-ammoniac or sulphuret of antimony; where resolution delays, the same remedies with heat and flowers of benzoe; diuretics where œdema of the lungs sets in, with warm applications, an emetic and benzoe flowers; in case of continuous frequency of the pulse, digitalis; where spasmodic cough continues, narcotics; if stitches and pain in the chest persist, warm poultices, local depletion and blisters.

Pneumonia of adults with various exudations.

In the treatment of serous pneumonia, general blood-letting is entirely to be avoided, and local depletion also, for the most part. Digitalis is only to be used where there is great frequency of the pulse. The methods to which preference may be given, are: The expectant in moderate cases; an emetic or tartarized antimony in large doses where there is danger of suffocation; benjamin flowers

and camphor in an adynamic type. As supporting measures, warm poultices, counter-irritation upon the surface of the chest, mild expectorants, diuretic remedies serve a good purpose.

In hæmorrhagic pneumonia, the treatment is distinguished by avoiding general depletion, unless the hæmorrhagic exudation may have been induced by a traumatic cause in a robust person; by limiting topical depletion to cases of obstinate and severe dyspnœa, or pain in the chest; by the withholding of all debilitating and emetic remedies; by the beneficial use of ice-bags and the internal use of acids; by the necessity of exciting and tonic remedies (quinine), as well as such nourishment as will promote reparation.

Gray hepatization, rapidly developing itself, and the acute abscess-forming pneumonia, as they are generally early accompanied by prostration and adynamic symptoms, require a prompt resort to analeptic, exciting and tonic remedies, (which are usually indicated in the common course of pneumonia, at an advanced period, and by the non-appearance of a favorable crisis), such as benjamin flowers, camphor, senega, etc.

Still more necessary is the sustaining of the powers by camphor, quinine and wine in case of ichorous pneumonia, in which, at the same time, the expectoration must be promoted by benjamin flowers and myrrh; warm or aromatized poultices are also useful, and besides this, if hæmorrhage occurs, a suitable treatment is to be ordered.

In the treatment of pneumonia in children, the following peculiarities must be made prominent: The regimen must be maintained, under the given modifications, still more carefully than in case of adults, especially as regards temperature and nourishment. All very debilitating treatment is all the more to be avoided, the younger and feebler the child is. Mild cases of pneumonia are, as well as in case of adults, to be treated dietetically.

General depletion, beneficial for older children, is only exceptionally to be recommended in case of those under seven years of age; leeches must not be used on children under two years of age. The application of leeches to the pit of the stomach, or under the axilla, is most appropriate, and, for the most part, takes the place of general depletion, in case of nurslings from one to three; with children from two to five years of age, five or six may be applied, and more where the children are older. Their effect is most strikingly favorable on the first and second days, and they should be especially used, when, with acute fever, severe dyspnœa sets in from the very first, which cannot be relieved by warm compresses and emetics. Salt-petre operates more powerfully upon children, and, if early used, often

suffices alone, essentially to moderate a fever which commences with violence. Emetics are, in the beginning, of great use. The quantity of the Antimony need not be large, and may best be given combined with Ipecac and syrup; after vomiting ensues, the continued use of Sulphuret of antimony is useful. Calomel is sometimes very useful for small children, after employing an emetic, as well as, in case of slight dyspnœa, in place of the emetic and by itself alone, or with the Sulphuret of antimony. Digitalis appears to be suitable only for children somewhat advanced. Opium is only to be used under urgent indications, and on account of great restlessness and utter sleeplessness, at a period when the crisis may be soon expected. Benjamin flowers and Senega syrup are favorable adjuvants, where resolution is delayed. Where collapse is threatened, or actually present, and there is extreme prostration, Moschus, and the use of the warm bath, may sometimes contribute to a favorable change.

Treatment of acute pneumonia in the aged. In pneumonia in patients over sixty years of age, or in those who are prematurely aged, debilitating remedies, even at the outset, are to be used only upon very urgent indications, and with great circumspection, and in the advanced stage, not at all; general depletion, emetics, Tartar emetic in large doses, saline laxatives, strict diet, even Digitalis and Saltpetre are often not well borne, at least, in large doses.

At the commencement, together with the regimen, warm fomentations, sinapisms, nauseating remedies, small doses of the acetates or nitrates are suitable, and, if necessary, a local depletion.

As the disease progresses, it is desirable to promote expectoration by the use of Ipecac, Kermes mineral, Sal-ammoniac, Senega, and to give supporting food early.

The use of irritants, Benjamin flowers, Camphor, Quinine, is necessary much oftener and much earlier in the pneumonia of the aged, and even moderate doses of wine may be allowed.

The use of diuretic remedies, in case of imperfect secretion, and of powerful evacuants (Rheum) in case of sluggishness of the bowels, should, for the most part, be dispensed with.

The treatment of secondary and complicated pneumonias must resemble that of simple and primary pneumonia all the more in proportion as the symptoms are alike, and the more the pneumonia represses the symptoms of other existing disturbances.

As regards internal remedies, cures with Tartar emetic and large doses of Saltpetre are to be avoided, while other medications are permitted in severer cases; in slight cases, on the contrary, it is better to

follow an expectant treatment and one which removes injurious influences.

Those pneumonias which complicate chronic lung diseases, and thereby present but few prominent symptoms, are to be treated as acute exacerbations of the disease of the lung, or as chronic pneumonias.

Pneumonias of drunkards will bear no debilitating treatment, no blood-letting, but on the other hand, they bear emetics very well (especially Ipecac), to be followed by Digitalis, and often require the use of Camphor, on account of the frequently impending collapse.

Pneumonia, with severe intestinal catarrh, contra-indicates general blood-letting and the use of strong medicines. Calomel seems useful in such cases sometimes. As a general rule, a mild, expectant treatment is to be followed.

Pneumonia in course of typhus, of acute exanthems, of epidemic bronchitis, of pyæmia, etc., require, only in case of robust subjects, and where the pneumonic symptoms make themselves very prominent, a treatment similar to that of severe croupous pneumonia.

Finally, topical applications are to be used according to the severity of the phenomena, mild expectorants at first, as Ipecac, Kermes, Sal-ammoniac; subsequently, where the disease threatens to assume an ominous character, irritants, as Benjamin flowers, Camphor.

The pneumonia of cachetic and marasmic patients is to be treated like that of the aged.

All secondary pneumonias, which produce no functional disturbance or but few, are to be treated only by the removal of all injurious influences, refraining from direct attacks upon the disease till dyspnœa sets in, and, even in this case, topical means and only mild internal remedies ought to be applied.

The treatment of chronic pneumonia and of the transition of pneumonia into a chronic state, does not essentially differ from the treatment in other chronic lung and bronchial diseases, and must regard:

The quality of the air, uniform temperature, cleanliness; the warding off of injurious influences; sufficient nourishment, consisting chiefly of mild, unirritating food; promoting expectoration, favoring absorption of the deposits by appropriate mild means; where there is an insidious advance of the disease into the capillaries of the lungs, the restriction of the same by acids, astringents, *Secale cornutum*; operating upon the constitutional disturbances, which possibly lie at the bottom of the local process, and may sustain it; the removal and restriction of annoying symptoms.

All chronic conditions, hereto belonging, require care and gentle assistance, rather than violent attacks upon the disease; above all, a mild, strengthening diet, goat's milk, asses' milk, moss, carrageen, pure warm aromatic air; the continued use of moderate diuretic means, mild laxatives, mild expectorants (small doses of Antimony, of the species pectoralis, sweet fruits, the grape cure), resolvents (saline mineral waters, Muriate of lime, Baryta, Iodine), and the prolonged use of setons."

§. 148.

What is called Therapeutics, in the sense of the physiological school, we have, according to its subjective manifestations, been brought to know as exhibiting a dogmatical and skeptical tenor, and thereby have acquired an insight into the *mode of its knowledge*. Before I proceed to the *sources of knowledge* of its therapeutics, I have a word to add to the above given quotation, in relation to the modes of knowledge.

The *relative ideas*: chiefly, especially, exceptionally, sometimes, mostly, preferably and the frequent comparatives, again indicate the *imperfect inductions* to which the treatment is subjected; accident plays the chief part there, for, with such ideas, the impossibility of a result, contrary to expectation, can never be excluded. Hence, there is no talk, either of an empirical or of a rational treatment, and, besides, we are presented with absurdities, as, for example, in the remark that the pneumonia of the aged ought to be treated like that of the cachectic, as if the aged were cachectic, and the cachectic were aged; or, simple croupous pneumonia of moderate degree, gets well of itself, under dietetic treatment, as if recovery and cure were the same thing; or, in case of rapidly forming gray hepatization, as also in case of ichorous pneumonia, the chief thing is to see to keeping up the strength, as if that could be called therapeutics, etc.

If now, from the foregoing, it must be seen, that the mode of knowledge of this Therapeia on all sides, is partly erroneous and partly insufficient, we have yet to prove, whether the *sources of knowledge* will perhaps compensate for this.

For this purpose, we must refer to the *Materia Medica* of the physiological school, and it will suffice to hear one of the newest works of the same year, upon the value of the drugs just recommended in the treatment of pneumonia.

Benjamin flowers are there treated of, among others, as follows. their therapeutic use has been hitherto somewhat *irrational*; they

have been used as an emmenagogue, in blenorrhœa of the lungs with asthmatic symptoms, and in hooping-cough. More rational are the experiments which have been made with it in acute exanthems with retarded eruption, and in the late cholera epidemic in Leipzig in the uræmic stage. The secretion of perspiration after its use, *seems* to call for farther experiments.

Of *Tartar emetic*: as the frequency of the pulse diminishes, the necessity of rapid oxidation also *naturally* decreases, and the act of respiration hence takes place more quietly. That, by the primarily affected gastric vagus, a direct influence is exerted over the pulmonary branch of the same nerve, and expectoration is favored in this way, seems not *improbable* from clinical observation, though this question remains, as yet, undecided.

Of *Saltpetre*: in none of the diseases against which it has been recommended, nor in *inflammation of the lungs* has any result been observed which can be ascribed with any certainty to Saltpetre.

The *compounds of the Sulphuret of Antimony*: are used essentially for the same end as the tartarus emeticus, and differ from the latter, only in their limited solubility. The Sulphur combined herein *may* contribute its part to increase the irritating effect upon the skin and lungs.

Of *Ipecac* in small doses: That the respiratory organs are affected by Ipecac, similarly to the stomach, is *probable, a priori*, from their intimate nervous connections. The vagus which supplies the stomach with twigs, sends, from its pectoral portion, the *N. laryngeus inferior* to the larynx, the *rami tracheales inferior*, to the trachea, the *plexus pulmonalis posterior* and *anterior*, to the lungs where the *plexus pulmonalis posterior* connects itself with the *ganglion cervicale infimum*. In fact, not only the secretion of the whole respiratory mucous membrane is favored by this drug, but also the expulsion of the sputa from the lung cells into the larger bronchi, and, hence their expectoration, which expulsion, it appears from Henle's experiments (*Tonus und Krampf der Bronchien*), depends upon the muscular activity of the pulmonary cells.

Opium: that is, morphine, finds an extensive and soothing application in diseases of the air-passages, though chiefly upon symptomatic indications, against pains, nervous irritability, sleeplessness, dyspnœa, cough, and as an adjuvant of other remedies in hæmorrhages.

Digitalis: Hæmorrhages of the lungs in tuberculosis not very far advanced, and, accompanied by hypertrophy of the heart, *seem* especially appropriate to the use of Digitalis, which, for this purpose, should be combined with the acetate of lead or opium.

Concerning the operation of *sal-ammoniac*, the greatest *confusion* prevails.

Senega: is used *very frequently* as an expectorant in the later stages of acute and chronic bronchial catarrh, to remove the tenacious masses of mucus. The use of *calcareæ muriaticæ* is purely *empiric*, since the chloride of lime itself is at once decomposed in the blood, and hence we *cannot know* its direct effects.

Of *Baryta* it is said: How small doses act is *not known at all*; it is worthy of remark, however, that large doses pass off by the urine unchanged.

Iodine does not appear among the absorbents, among which that author [Wunderlich] upon pneumonia places it; this one says: A saturation of the system with Iodine cannot easily be accomplished, on account of its rapid excretion.

Another author of a text-book upon general and special *Materia Medica*, published in the same year, Dr. Bernhard Schuchard, holds again an opinion different from the preceding.

According to him, *Benzoic acid* is to be used in chronic affections of the lungs, especially of the bronchial mucous membrane, as a powerful expectorant, etc.

Tartar emetic, in doses of from one-tenth to one-eighth of a grain, in acute catarrh of the intestinal tract, in acute catarrhs of the respiratory mucous membrane, and especially in the pneumonia of robust individuals, etc.

Saltpetre, as a so-called antiphlogistic remedy in congestions, especially towards the head and lungs, in inflammations, in all conditions, with a so-called inflammatory fever, etc.

Sulphuret of Antimony, chiefly in catarrhal, and even slight inflammatory conditions of the respiratory mucous membrane; less frequently in inflammation of the substance of the lung itself, etc.

Ipecac, as an emetic, even in pneumonia, when the lungs are otherwise diseased.

Of *Opium* he says: In inflammatory diseases, Opium has not been fully appreciated, till lately, in its particularly important significance in many cases of pneumonia, far advanced, with a very tormenting cough, great sleeplessness, etc.

About the effect of *Digitalis*, according to him, the greatest contradictions prevail. While some acknowledge its effect of diminishing the frequency of the pulse, others deny it and declare that they have witnessed an increased frequency. Most, however, agree upon this that it is a *diuretic*," etc.

Which, now, of these teachers of *Materia Medica* is right, and

what are the ways and means of the physiological school to extricate itself from this chaos of contradictions?

§. 149.

If we now apply the rule of deduction to the opinions according to which that Therapy of pneumonia is handled in the quotation §. 147, we find there nothing of the kind. On the contrary, we see the causal law, as a primary experiment false, employed in its most unlimited extension without any further thought, and with a *faulty conclusion*, that is, from the effect to the cause; *for the causal law can be made available only where the cause is fixed, to conclude from it to the infallibility of the effect.*

Depletions, for example, are prescribed for extreme hyperæmia of those parts of the lungs which are not the seat of inflammation. But this hyperæmia is not the cause of the inflammation, or, of the diseased process, as it is called, but a consequence thereof. But granting, although this is never the case, that the hyperæmia were the cause of the inflammation, yet it would first have to be established, according to *the law of effect and counter-effect*, that, by depletion, the changed form of nutrition and function can be restored again in a given case, *ad integrum*, and why; but, for this again, no determinate facts are at hand, and least of all, in the physiological school. Or, it is said that Tartar emetic should be brought into use as a nauseant. This happens again wrongly according to the law of *effect*; we seek to produce nausea in order to keep down the functions of the nervous system. But the greater activity of the nervous system is again not a cause, but an effect of the inflammation, and the intention to suppress this effect by force, rests upon the same false conclusion. An attempt is thus made, in this Therapie, to benumb single symptoms or several symptoms together; they are all *attacked* by turns with remedies, by which a superficial view and *improper use* of the causal law, hopes, in the best way, to attain this end.

But the causal law is also the law neither of the healthy nor of the diseased life. The organism, moreover, does not become diseased in consequence of morbid causes alone, but from a combination of these with their counter-effects, which are overpowered by the former, and whereby a *specifically changed* form of life is ever produced, which form cannot be attacked partially in its organic equivalent counter-effects, without thereby inflicting suffering upon the organism itself.

The therapeutics of the physiological school follows, not only in pneumonia, but in all the cases with which it meets, the law of causality *only*, whereby, at the most, palliative or prophylactic temporary alleviation may be obtained, but never a cure; and, indeed, according to the laws of Nature, this never can be attained, because (one cannot often enough remind this school of this), the universal law of healthy as well as diseased life, is that of the equilibrium of action and counter-action, and *not at all that of causality*.

In the results, which this school has *accomplished* upon the sick, since the remotest antiquity, with its so-called curative means, in accordance with the causal law, consists the whole comparison of its reproductive imagination even for its present Therapeia. The assertion of this school, for example, that "Benzoic acid is indicated in pneumonia because it has become known chiefly as a powerful expectorant," allows no synthetic comparison according to any known law; for all pneumonias, the earlier and the later, may be compared with one another in all their stages, and even the favorable or unfavorable results obtained by the Benzoic acid; but I thereby never attain to any rule which, standing above this analytical comparison, can indicate, *a priori*, anything more than a problematical result. §. 73.

Every synthesis, according to natural law, is lacking in these comparisons; they do not rest upon a generality, by the connection of which with the fact, the particular of the case of disease and the indication could be determined in their specific relations to each other. But the intellect must ever have the means to proceed from the general to the particular.

Homœopathy, however, forms the synthetic instrument of its comparison, for the indication of its remedy for the patient, with its drug-provings upon the healthy, which tells it *more clearly*, and makes more evident, what is going on within the patient in hand, than all other diagnostic technics. While it draws a comparison between the symptoms gathered from the drug-proving with those observed in the patient, it recognizes, from these *products* of two different causes, the whole significance of these causes, and takes its indication from the similarity of these products. If it goes, then, to the bottom of the conditions under which these products, these symptoms could be produced according to chemical, physical and other laws, it thus finds, also, the process in pneumonia which is thus transpiring within the organism, and that is, to wit, a process of reduction, consequently just the *opposite* of a Phlogosis, vulgo, Inflammation.

Even the kind of process which constitutes such forms of disease should hence clearly lead to a *phlogistic*, but never to an *antiphlogistic* treatment of the same, §§. 64, 66.

In what light the physiological school, with its antiphlogosis as opposed to its so-called inflammations, stands in the forum of chemistry, I need not further show. This much is certain, that, so long as the idea of "*Inflammation*" is not banished from its Pathology, the physiological school, as often as it makes use thereof, displays its crude irrationality before the world and all science.

From all this, it is again clear, that it is, for the most part, impossible for the physiological school to draw a conclusion *from the result to the medication and vice versa*; in successful cases, it never can declare whether its remedy has cured, or, whether other circumstances effected the cure; it has, as in unfavorable results, a thousand subterfuges, but never a proof; hence it is silent on this point before its pupils, and its prescriptions are thus mere advice for *primitive experiments upon the sick*. §. 90.

§. 150.

Since every one can cull for himself, in works of this kind, it cannot be desirable, nor is it worth the trouble to go more into detail with these *Materiæ Medicæ*, because, from what has been presented, the sources of the material brought out in the therapeutics of the physiological school are sufficiently characterized. For a therapeutic elaboration we miss not only leading principles, but also the art of observation in all the therapeutical and pharmaco-dynamical experiments undertaken by this school, and so very much that any one may declare that he has made a discovery to-day and find it disputed *to-morrow* or that a discovery actually made will be *pronounced false*.

In *the first regard*, I may mention that Wunderlich, in his larger work, enumerates even specifics, as, for example, Aconite and Phosphorus as remedies *for*, or rather, to be more exact, against pneumonia, although he makes no *practical use of either at the sick-bed*. And now we have the following, among other things, from the author of the *Materia Medica* just quoted, "Schroff" comprises the chief effects of *Aconite* upon the eye in the following statements: Aconite, and especially the Aconitine therein contained, produces, both when applied externally to the eye, and when given internally in sufficient doses, dilatation of the pupils, in *opposition* to the generally prevailing opinion of pharmacologists, only Geiger and Hesse noticed *dilatation of the pupils also*. But, if Pereira himself, in the last edition of his *Materia*

Medica (1853), speaks of the contraction of the pupils, on the strength of his own experiments, this can only be explained by assuming that he *allowed himself to be misled* by the unusual mobility of the iris occurring immediately after the operation of the Aconitine, from which the pupils sometimes seem to be, for a moment, contracted." "I" observed after the application of a solution of a grain of Acon-Sulph. upon the eye of a man, a violent irritation of the conjunctiva with lachrymation but no *contraction of the pupils worthy of mention.*"

Thus, one maintains that he observed dilatation of the pupils, another contraction, and the third saw neither upon the use of Aconite. This strain runs through the whole *Materia Medica* of the physiological school, and is called a doctrine, and this doctrine is brought forward with unction, studied with faithful devotion, and received as true and unerring. Here we have an unexampled method of teaching on the one hand and simple-heartedness on the other.

Concerning Phosphorus, the same teacher of *Materia Medica*, thus expresses himself after long discussions: "No cases have as yet occurred to me, in which Phosphorus has effected anything. Here we must, however, consider that most of the ailments, against which it has been used, are incurable." Yet, according to this same teacher, Phosphorus is to be thought of in impotence, chronic nervous pains, intermittent fever, cholera, paresis, and for promoting the eruptions of delaying exantheams, but is never mentioned in connection with pneumonia.

Regarding the therapeutic use of Aconite we read further from the works of the same teacher. "It is used against neuralgias, gout and rheumatism, chronic dyscrasiæ (scrophulosis, tuberculosis, syphilis, chronic skin diseases, cancer,) which, however, is not confirmed by experience; moreover, as a diuretic, for the prevention of purulent absorption after severe operations; in *Homœopathic* practice, where Aconite has long been known as a very efficient remedy in fever, congestions, inflammations," etc.

Now, it might be well known to Professor Wunderlich, from hearsay, that not only Aconite, but Phosphorus also, has been tested to the fullest satisfaction in *Homœopathy*, as specific against some forms of pneumonia. His mentioning these specifics in his work, without announcing the source whence he derived the information, is all the more purloining, as he had no practical experience of the matter; for the dose, in which these remedies were used by *Homœopathists*, he could not use, without giving the lie to his common places, which he felt at liberty to use against *Homœopathy*; on the other hand, it would not become a Professor to know nothing of the fact. Or, Phosphorus

has solvent effect upon the blood-corpuscles but Nitrum not; that could certainly not be the reason why he gave Nitrum the preference?!

§. 151.

In the *latter respect*, as regards the erroneous view of a well tested remedy, a Professor read, for instance, that a physician in Paris obtained remarkably favorable results in syphilis with the help of Kali bichromicum. Now he experimented with this medicine, in his Clinic, and found that it would indeed cure ulcers of the fauces and periostitis, but not condylomata, lupus, ichthyosis and psoriasis guttata, of syphilitic origin. The conclusion was quite ready at hand, viz.: that Kali bichromicum was no *anti-syphilitic*. As if that had been the question! The Kali bichromicum cures the first two forms, according to the simile, because it possesses a specific attraction to their anatomical *localities*, but not to those of the other forms. But the physiological school always has to do with generalized pathological forms only, as if all proceeded from *one* cause, and it seeks only an *anti* for these causes. It believes by no means in a certain result, if its premises do not agree with the arbitrary ontologies of its perceptive power.

It is known, to be sure, that it has no other opinions than dogmatical and skeptical, and that one is not obliged to govern himself according to such opinions. But, in view of the confirmation, partial at least, and coming from the very ranks of that school, has not skepticism, boundless as it is, gone too far, when the author of one of the more recent works on medical chemistry, ventures upon the strength of experiments, and nobody knows how they were conducted, to affirm "that Kali bichromicum is a remedy which may well be dispensed with for internal use; and that only its external use, especially as an escharotic, might be defended with some plausibility?"

Moreover, the physiological school not only lacks, as has been shown unmistakably enough we think, the *logical instruments* for the application of its chemical, physical, physiological, and other investigations, and for attempts at explanation based thereupon; but it lacks, also, for its Therapeia, the first *practical* instrument, the *sine qua non*, which must antedate every therapeutical experiment; it lacks a *uniformly* arranged Pharmacopœia. To judge of the effect of a drug upon the sick, to inquire of the organism how it *reacts* against given substances, as the purely chemical view of this school delights to express itself, for these purposes, above all other things, we need every where the same re-agents and similarly prepared with the greatest exactness;

drugs here take the place of these re-agents, and the greatest care must be exercised to keep them pure. But there, some vegetable substances are boiled, others are evaporated, others scalded; chemical preparations are prepared after different formulæ, in different countries, and adulterated by inter-mixture with others. If one, to prevent sinking in this current of illimitable confusion, looks about him for a straw, merely for a thought, as to some point of support, in accordance with natural laws, no where is one to be found.

The *source* even of the *Materia Medica* of the physiological school is, hence, utterly turbid and, for a science, entirely useless.

One demands that the physician should think chemically, another, that he should think microscopically, while there is no talk whatever of therapeutics; on the contrary, the study of an elementary specialty, that of physiology, that of experimenting is alone demanded and furthered, and thereby is engendered an incapability of grasping the study of Therapeutics.

This clinical instruction, experimental as it has become, rebukes itself already in the medical debates instituted as the ultimate test of candidates aspiring for the degree of Doctor Medicinæ, the last trials for the young physician, touching his *faculty of judgment* and his capacity rightly to use logical instruments in the scientific controversy.

Now-a-days a graduation-examination is held to have been passed in an eminent manner, when the candidate advances Theses which he has deduced from experiments undertaken by himself, experiments which nobody but himself has ever made, and against which, naturally enough, nobody advances or can advance an argument. A more easily obtained success one cannot well conceive of.

I present, for example, the Thesis: "The coloring matter can be separated from the urine."

Every opponent will simply say, no such thing can be done, because the most learned men who have undertaken to accomplish this task have never succeeded.

To this I can reply: Take two wine glasses, bore a hole in the bottom of each; connect these two glasses by a platina wire run through these holes; stop the holes with gutta percha; fasten some strips of platina on the end of the platina wire in each glass; now fill both glasses with the same urine and conduct the poles of a galvanic pile of from 10 to 14 small carbon-zinc elements to each glass; then, as is well known, in one, hydrogen will be developed, in the other, oxygen-gas.

Now connect these two glasses, filled with urine, still further by means of a bundle of glass threads, long enough to reach from the

bottom of one glass over its edge to the bottom of the other, then, by means of a kind of capillary attraction, which takes place in this bundle, under the influence of the pile, all the urine in *one* glass in 8—10 hours becomes as *clear as water, perfectly bereft of its coloring matter*, and on the bottom there will lie unusually large crystals of ammonio-magnesian phosphates; while, in the other glass, all the coloring matter of the urine will be collected, the urine will be dark-colored, and, on the bottom of this glass, the largest dark-yellow crystals of uric acid will be found, provided the pile was neither too strong nor too weak for the proper development of both gases. The experiment may be further continued, by separating the contents of each glass and uniting them again under the poles of the battery, and so on.

I am not at all inclined, however, to claim the discovery of this process as any great accomplishment; I wish only to show, by one example, for many, that even practicing physicians can exercise the easy art of experiment, only many have lost all desire to contribute to the unpractical medical literature of the physiological school.

If, now, it may be permitted, in the absence of other tendencies, that, in graduation-examinations, such Theses should be presented, then the opponents must be silent, of course, and the whole object of the examination is lost, although it may happen that, for the present, such Theses may receive recognition truly remarkable.

§. 152.

In this, its course, the physiological school can never make any progress in Therapeutics, and, under such guiding principles, which are confounded with axioms, it will always examine and use even the substances of the outer world only in the aggregate condition in which they are accidentally offered to it; this condition is generally one of intimate cohesion, the quantity of which, when there is any doubt about its effect, it merely increases. This method stands directly opposed to the art of experiment, and the rule, to change the conditions in order to come at the law, is, in this respect, also disregarded. According to the foregoing, we should also, for the elaboration of *Materia Medica*, experiment only upon those objects upon which the results discovered are to be employed, hence only on the human organism in its various forms, ages, sexes, etc., not on animals.

In such experiments, however, above all things, the most turbid source of all human judgments, the advancing of a *subjective opinion* must be entirely excluded. Therefore, upon all the drug-provings of the physiological school, which does not know how to protect itself

from such errors, there rests, on this very account, the reproach of irregular procedure, and the suspicion of worthless results, because these provings were undertaken by those who had some previous knowledge of the substances to be proved in ponderable quantities, at least chemically and physically, by which knowledge, the judgment may be warped.

Moreover, it is not enough to understand the laws of nature by which a substance, in a crude state, produces a form of reciprocal action with the organism: it must be proved, also, for the sake of the completeness of the experiment, in that form in which its *molecules* are set free.

To the physiological school, led as it is by chemistry, many molecular motions are a *terra incognita*, just as they are to the latter.

The molecules of all bodies *effect changes* in one another in contact or at a distance, and that, according to the laws of nature, they could not do, did they not *themselves experience changes* at the same time, for nothing in nature can be active or passive alone, as soon as it is brought into contact with other matter. This law of nature is so little known in chemistry, that chemists resort to all sorts of hypotheses, when effects thereof present themselves in their laboratories. Thus it has, aside from the catalytic force, adopted also, among other things, the so-called predisposing elective affinity, as, for example, the presence of Potash *predisposes* manganese or chromium, when subjected to *heat*, to abstract so much oxygen from the atmosphere, as to form therewith manganic or chromic acid. But how should the Potash, by predisposition, evince thus an attraction towards the acids not yet present. It is equally false to assume that the contact of the Potash, with the above-mentioned metals, increases the efforts of attraction of the same for the oxygen, for this presupposes that the Potash remain unchanged; for all things which come in contact *must* necessarily affect one another reciprocally. That our senses do not recognise one part of the change, is no criterion against the law of nature. In order to study these laws of the molecular forces, it is necessary, of course, for him who wishes to perceive ponderable results, that he should operate with correspondingly large quantities, and he will, nevertheless, find the existence of the law of nature in question confirmed. In the physical momentum of heating, of the elevation of temperature, which liberated the closely *combined molecules* of the Kali and the Manganese, from this condition, by separating them a certain distance from each other, lies the whole riddle.

Since, however, the doctrine of *heat* has been treated, up to the most recent time, under the head of the most imponderable *substances*, the

idea was therewith conjoined that it must be a substantial, though an imponderable body. But that was false; for then either the doctrine of the *specific heat of bodies* was overthrown, while it is fully established, or, heat as a substantial body, must *itself possess a specific heat*, which, however, would be absurd, since nothing can be predicated of a univocal idea;* *hence all heat must inhere in the bodies themselves* as an integral part of their whole. A chemically compound substance must contain just so much heat as all its constituents contained in their separate state, and at the same temperature. That can easily be demonstrated by the Physics of the molecular forces.

In fine, the only effect of heat which we observe is, that a body expands when it is raised to a higher temperature, and contracts when the temperature is lowered. *Expansion*, however, can only take place by the repulsive force of the molecules, hence elevations of temperature and force of repulsion form correlative ideas. During such an expansion, *in connection* with an elevation of temperature, corresponding movements must also occur within the affected bodies, and indeed this may clearly appear sometimes *with* and at other times *without* apparent chemical changes. Thus, for example, highly polished glass affects the multiplicator oppositely to roughly polished glass, hence, in presence of the same chemical property and of a *change* only of the *superficies* of the *solid* body.

Nitric and Acetic acid, have both a sour reaction but, on *evaporation*, the former appears electro-positive, the latter electro-negative. Ammonia and Kreosote are electro-positive fluids, but, if placed upon the positively charged conductor, they become negative. That can happen, simply and solely, only by the changed molecular groupings; by motions, which are no longer within the reach of our senses.

In inorganic nature, however, we may, frequently, observe these immediately.

We know, for example, that Sulphur, in crystallizing from a moist solution, assumes the form of rhombic crystals only. It happens, however, when the cooling is delayed as much as possible, that whole clusters of these crystals are retained in their normal transparent state; at the same time, these crystals become suddenly opaque upon the *least jar*, so that it is enough, merely to jar a few in order to bring all from their position, and to give the whole mass a certain degree of porosity. It is also remarkable, that, while this change of molecular conditions is taking place, a *new development of heat* occurs.

Many other changes of qualities occur in many bodies, *by simple concussion*. Let one shake, for instance, the rhombic crystals of the

* Da von einem einstimmigen Begriffe nichts prädicirt werden kann.

yellow Iodide of Mercury, and they will suddenly assume a red color and a quadrangular crystalline form.

So we also obtain the most various qualities and even quantities of molecules and changes of their directions and intervals by *evaporation*; by *changes of the superficies* of their bodies, of their aggregate *condition*; by motions in consequence of various *degrees of temperature* imparted to them; all conditions, according to which the molecules of bodies may pass from their aggregate to a free state, or, *vice versa*; and, in the former cases, we observe even migratory movements of the molecules of the body *outward*, one of which announces itself by the radiation of heat.

Hence, it again follows, that every body which, from whatever reason, gives off heat, even though in consequence of heat externally imparted to it, gives off, together with a part of that which is received, certain portions also of its own molecules, in the form of heat; *gives off thus parts of its own very self*, to the cooler surrounding, just as is wont to be the case with magnetism, electricity, light, sound, the evolution of gas. *Heat is therefore not only not a substance sui generis*, but is a portion of the very body which casts itself off in this form, in consequence of external causes. If we know that the *organic* molecules possess an infinitely greater facility of motion and change, than the inorganic, then the importance of these studies, for the purpose of judging of organic motions and *physical* phenomena is self-apparent, and we shall be no longer surprised, for example, at the evolution of heat during every nutritive addition to the organism, *i. e.*, during its formation of hydrates and other reduction processes, whether in a physiological or pathological form; it can only operate by separation in order to make other combinations possible.

By a peculiar fatality the simplest appears very often the most enigmatical. Do we not observe, to offer an example *ad hominem*, a hundred times in our own body, that the heat of an iron stove produces a change in the molecules of our body, a manifestly different sensation from that produced by a porcelain stove? Does not this difference of sensation announce to us a difference in the form of the radiation of heat, and, according to the law of specification, a different material composition of the body also? Or, are heat, electricity, magnetism, supposed to be nerve forces and not substances at all, which operate at a distance? Truly, the confusion of the school regarding molecules and molecular forces and their motions announces itself by its very designations, as it takes heat, for example, to be an agent, but uses the *same* name for its cause, as well as for its effect, as if a popular view, as that about heat, must also be that of science.

This arises from the somewhat inveterate neglect of the use of logical instruments, in cases where the technical instruments and experiment forsake us. Because practicing now the easy art of experiment only, and having become unused to the far more difficult task of being able to employ logical instruments, they fear, every moment, when they might have to supply the want of experiment, by the laws of the mind, that they might fall into *hypotheses*. But *hypotheses* arise only from *empirical* or *incomplete inductive* conclusions. Were the *deductive* series of conclusions known to the school, it would also know that these hypotheses are no longer so useless when we ascribe to them only the importance of the second deductive process, and, from them, proceed at once, to the third, to the work of confirmation, in order to discover their verification or falsification.

Physics, which occupies itself mainly with the *qualities* of bodies in nature, is neglected. On the other hand, the majority of our learned physicians direct their attention, for the greater part, to chemistry, to profit by its *quantities*.

Chemistry, however, is, for the time, only a great experiment, and while it refers back its *quantities* to oxygen, carbon, nitrogen and hydrogen, it possesses units it is true, but for the time being only, for the simple aim of analytical comparison.

§. 153.

But there are *two sorts* of comparisons, of which one measures two subjects, by each other, and the other two predicates. Chemistry, occupies itself merely with the comparison of *quantities*, hence it does not know what to do with *qualities*, and the physiological school thinks itself constrained to walk in its footsteps; thus it *experiments* with quantities *ad libitum*.

The same quantity of Quinine, which the Physiologist gives his patient, he finds excreted again in the urine to the very last particle of weight, and is not in the least astonished, though it cures, for him, between its entrance and exit, a fever and ague. He rubs his hands thereupon with satisfaction, to have discovered something chemical, which no one, as he concludes by himself, can explain. To give himself the further trouble, however, to solve the very essential problem itself, that, viz., of the explanation, *that*, he very self-contentedly leaves undone, since it does not lie directly in his way. But it should lie in his way, as soon as he, (as it nevertheless is wont to happen), wishes to pass himself off as a therapist.

On this account I gave no quotation touching the *dose* of the drugs with which our Professor vexes his patients in pneumonia, because the physiological school, on this point, is clear, least of all, and is of the firm conviction that it is right to treat according to *tradition*; this school which plumes itself so very much on believing nothing which is not verified by experiment.

From all this it is clear, that, within the limits of this school, no proceeding conforming to natural laws is to be found, such as might be made possible or at least to be hoped for, regarding Therapeutics, according to the requirements laid down in the previous paragraphs.

§. 154.

It is no part of my intention by the previous fundamental demonstration, (which cannot be overthrown), regarding the actual discord of the therapeutics of the physiological school, to detract from the merits of the assiduous diligence of the Physiologists in other respects; on the contrary, I must, as must every one who is acquainted with their aim, and their results, as far as they have *only* a physiological bearing, accord to them the fullest acknowledgment. I am mindful, however of *ne sutor ultra crepidam*, for neither Physiology, Pathology nor any branch of natural science leads to Therapeutics. Physiologists may spare themselves the useless labor of meddling with the laws of Therapeutics.

It is by no means always those who are least informed, who most obstinately resist progress in Therapeutics, but it is often those worthy of all honor, who, under the dominion of an idea, feel that they are bound to reject, without trial, all facts which seem to contradict that idea. §§. 3, 6.

The characteristic traits of the physiological school consist, according to the foregoing, mainly in this:

1. That its diagnosis rests upon the *description* of diseases, upon the enumeration of symptoms, hence, upon the elaboration of emblems, of symbols; for every one of its representations of a disease is symbolic or figurative. But since these symbols lack all and every *counterpart*, which is given in Homœopathy, in the drug-provings, so is an exhaustive and correct announcement of all which is wont to happen, *impossible*.

2. In this, that its Therapy rests entirely upon tradition, hence upon the faith in probabilities touching events that take place, and conjectures, the correctness of which can only be estimated according to the number or weight of the *opinions* given in deposition by wit-

nesses, which hence must offer a far lower degree of conviction than knowledge offers; for knowledge is a conviction from compulsive necessity, and, since this school is void of this property, it can hence know nothing of Therapeutics.

3. In this, that consequently their *whole* mode of knowledge, derived, as it is, only from the domain of the *organs of the senses*, is subjected to accident; for accidental is that, the presence of which is perceivable by the senses, *i. e.*, a *posteriori*; necessary, on the contrary, is that which may be known *a priori*.

§. 155.

To one fundamental maxim, as we are wont to say, in every-day life, but only to this one alone of the Therapeutics of the physiological school, I must unconditionally assent, namely this — *to neglect nothing which may be useful to the patient*, and to this I add—even if nothing thereof is found in any text-book, and nothing of it is taught from any Professor's desk. In this respect, no physician may shrink from experiment in all cases where science leaves him in the lurch, *i. e.*, in all cases declared by science to be incurable, *excluding everything which, according to the laws of physiology, might offer the least ground for the supposition that any injury might be done to the organism, be it ever so little*; a procedure, it is true, that is not acknowledged, by the physiological school, which demands that the treatment should be *bolder* where the result is dilatory in appearing. In all such undertakings, the law of deduction, at least, must be observed. Thus even here the question is not as to *reflection* and *consideration*, which belong to arbitrary opinions, but as to the art of experiment and that of observation. §. 71.

But when, according to Wunderlich, Physiological medicine, on the ground of humanity even, and, with perfect right, announces the maxim “to omit nothing which can be useful to the patient,” then its scorn for Homœopathy, and its *firm purpose* that it will learn nothing of this science, rich in blessings, is in the most crying contradiction to this expression. Truly abundant in contradictions in theory and practice, as this school is, even this one does not weigh heavily upon it! But Schopenhauer says, “the will is always the secret opponent of the intellect.

HYDRIATICS.

§. 156.

If, however, the arbitrariness of the subjective opinion ventures to strut forth as a regulator of Therapeutics, then it is an indispensable, though, truly, a very wearisome task, to lay bare, at least, some of the mental nakedness, so that every one may recognize what is concealed under the broad mantle of a so-called science. Thus I must protest, also, against the blind but frequent use of cold internally and externally in pneumonia, since, in the extent to which it is usually carried, it is an experiment without a leading principle conforming to natural laws. Pouring cold water into and upon the body of one suffering with pneumonia may answer probably in the very first onset of the disease, so long, only, as the oscillating conglomerations of blood-corpuscles fill up the affected capillary vessels. By this energetic suppression of the febrile heat, the movement in the organism producing this heat, the further formation of hydrates may be checked, and the further formation of exudation be prevented. Under this torturing procedure, relief of all the symptoms occurs, and what is the main thing, transpiration, as a counter-movement, ensues, which undertakes the organic work begun in another way. Thereby, not only injurious substances may be eliminated, but also the oscillating conglomerations of the blood-corpuscles may be dissolved in the inflamed parts, the circulation of blood in the capillaries of the vessels of the lungs may be re-established, while perfect *recovery* may ensue. But, if exudation and hepatization have once taken place, and this has often already happened before the physician is called, even then, no doubt, by the use of the cold water, all the symptoms will be relieved to a certain degree; transpiration also ensues, and the still oscillating conglomerations on the confines of the diseased portions may also be dissolved, yet the exudation, already present, is *unchanged* by this process, and the circulation, in the capillaries filled with the exudation, will never again be restored. This exudation degenerates, according to the constitution of the patient, into pus, or masses of tubercles, or it is transformed into insoluble hydrates, into complete cirrhosis; in brief, this whole part of the lung or lungs affected by the inflammation is *forever* lost; every path to a cure by absorption is cut off, because the tissue is destroyed, and can no more be restored than an amputated limb can be replaced. Such cases come to me only too often, having been previously discharged as cured by the so-called scientific Hydrotherapy.

But these patients, discharged as cured, lead a short and sickly life, suffering constantly from a shortness of breath, (which cannot be relieved) and die amid the most fearful tortures of dyspnœa and its results. It cannot be assumed that these processes are unknown to the physiological school, but why does it not only undertake such two-edged modes of treatment, but speak of them moreover as rational. That is no rational treatment; it is an inference from an incomplete rule, according to which some may have been cured under this treatment, without the necessary regard being given, according to the law of reciprocal action, to the changes introduced, by this treatment, within the organism. This treatment is thus a deduction from an incomplete to a complete effect, and discharges many as cured who are not. Such a treatment is thus governed by contingency, and not by the laws of rational induction.

§. 157.

If, finally, we consider the laws under which the procedures of the water cure must be followed by specific results, we hit at once upon the laws of diosmosis, and those of the constancy and equivalence of forces, according to which, on the one side, as much motion is lost, or appears in another form, as is gained on the other.

Our present state of culture, our lack of that exercise which would be necessary for the maintenance of a normal state within the organism, charges the latter, especially at the warmer season, with an overplus of tension-forces, by which this rest of the movable equilibrium, this organic effort, increased to its maximum—though still within the limit of proportional oscillation—is able to propagate itself and to arrest even more distant motions in such a manner that, although no nutritive changes can follow as yet, functional changes may nevertheless arise. Since the necessity for respiration rises and falls, for instance, only with the amount of bodily motion and with the temperature, so the molecular motion of the blood is, in one case, clearly increased and in the other diminished.

Such disturbed relations, thus, still contain the possibility of complete *recovery*, §. 42, by the equivalent degree of cold and heat applied. By the coldness of the water, opportunity is hence given to increase the molecular motions of the blood of the other fluid, as well as solid parts, motions which are restrained by these conditions, and the labor thereof finds compensation in the radiation of heat. With this radiation of heat, a marked organic loss occurs, which must be supplied by food and drink. I call to mind here what has been said

upon the molecular forces of the cells, and add thereto, that the cells are elastic, *i. e.*, they are bodies and particles which possess an expansive force, which decreases with the density, and hence with the cube, of the distance. But, according to the laws of nature, they possess, at the same time, a force of attraction at a distance, which decreases only according to the *square* of the distance. Since, now, the latter motion is able to check the former, and the capability of conduction is greater or less, as its specific density *in concreto* is greater or less, thus the possibility is given, even by merely provoking a change of the temperature alone, to arouse the molecular motions of the entire organism, both as regards intensity and extension.

It hence follows, however, that the rapidity with which heat is to be artificially withdrawn, must be governed by the density, hence, by the power of conduction of the affected molecules, and upon this are based the cures by deprivation, which are usually undertaken in such institutions, for the arousing of such regenerative processes. Thus we observe, for example, in the so-called torpid constitutions, less density and predominance of the cell-elements, hence, also, little excitability and great necessity for respiration; in so-called erethistic subjects, there is great density of the cell-elements, with predominance of the connective tissue, hence great excitability and less need of respiration; hence we may correct the first cases by withholding water and the use of external cold; the latter, by the copious use of water and vapor baths. The first process especially requires greater and more intimate knowledge. The so-called lymphatic constitutions, especially many forms of chlorosis bear abstraction of water, for example, far better at first; yet much more suddenly, in such cases, febrile symptoms ensue, often as early as after forty-eight hours.

On the other hand, experience shows that, after the use of great quantities of water, not only the quantity of the urine increases, but also, and *always*, the excretion of the solid constituents, yet, in accordance with the above therapeutic fundamental maxims, only up to a certain gradually increased quantity of water; when this limit is exceeded, and the use of this same quantity of water is persisted in, this effect is notably *less*, and, in the most striking manner, as soon as febrile motions are thereby excited. Fever is always a sign of an immoderate increase of oxidation and reduction, and all the same, whether produced by the abstraction or the supply of water. Yet all these organic motions undergo changes also, according to the variety of food, manner of life, motion or rest which is indulged in, and even in regard to sex and age, as well as the constitution of the body.

§. 158.

I cannot avoid referring, once more, to that experiment with Phosphoric acid, in order to show again to this experimenter that he would have hit upon a universal law of nature, and consequently a fundamental law of Therapeutics, had he preferred to consider other things rather than the abuse of Homœopathy, since even a substance so indifferent to the human organism as water, if taken in gradually increasing doses, *increases* the excretions by the kidneys, while they are *diminished* under the use of still larger quantities, and thus the first effect is changed into its opposite, till finally, even with water, a fever may be produced.

A Hydropathist, who wishes to proceed in accordance with natural laws, and obtain his result, would not wait for the febrile condition, but would, by that opposite effect, have recognized this stage, as that which is the most important and decisive for recovery, since, thereby, the beginning of the increased accumulation and reception of matter is announced, which he is aiming at. In the water cure, the object is not only to render active the interchange of matter in a *chemical sense*, but, chiefly, in the sense of the organic functions.

But, in the water cure the greatest attention has to be paid to the individual amount of water, for this involves, for the nervous system, and especially for the brain, the most important question, for as surely as mental disturbances occur from lack of organic water, so certainly are the insane asylums supplied from the water-cures, on account of this deficiency of diagnosis, which here has a bearing, not merely upon an intellectual aberration, but, on account of the importance of these organs, upon the danger to life itself. The more essential characteristics of those bodily constitutions, which will suffer still more under the use of the water cure, and in which it is hence utterly counter-indicated, follow in subsequent paragraphs.

§. 159.

Hydriatics, has, for some time, ceased to confine itself to cold water. It knows how to avail itself of the various temperatures of water. Thus, for example, its *palliative* treatment of a paroxysm of gout, by drinking water at a high temperature, may be fully justified, so far as it is directed to increased absorption of water and increased oxidation of the uric acid.

The external and internal use of cold water, approves itself, in that disease which is now-a-days, even in the text books, called *sunstroke*.

to be a method of treatment which arises from an essential indication.

Because, in those who die of sunstroke, hyperæmia of the brain has been demonstrated at the *post mortem*, though indeed this condition may be found in other organs also, therefore the physiological school, which is the mistress in the universities, classifies this disease among the inflammations and persistently, even to this day, prescribes general blood-letting for it, although the patients die almost instantly thereafter, or even during the bleeding.

Sunstroke is, however, never a sudden affair. During continuous violent bodily efforts, generally under a temperature of the atmosphere exceeding that of the body, and at the same time with deprivation of water, intentional or otherwise, a great thirst is first observed, according to my oft repeated observations; to this, loss of appetite is soon added, with bitter taste and white-coated tongue, sometimes nausea and vomiting ensue; the musculature loses its tensive power, and the movements begin to become dragging.

If no proper assistance is obtained or called for, the voice becomes thick and hoarse, swallowing produces intense pain, as if the most violent angina were present, yet there is no swelling of the affected parts to be observed. But, with a simultaneously occurring pressure upon the chest, with accelerated and shortened respiration, sometimes without the so-called angina, a peculiar irritability and depression of the mind presents itself, and, not seldom, the conjunctiva even is reddened. The gait now soon begins to be tottering, vertigo sets in or nose-bleed, and suddenly the victims, in full consciousness, fall upon their knees, and so unexpectedly to themselves, that they make powerful efforts to get themselves up again.

If there is still no aid at hand, the vertigo increases, the countenance becomes somewhat discomposed, the patients sometimes talk deliriously, or give confused answers in the midst of continuous and apparently indefatigable bodily effort, so that, whoever hears them, is not a little surprised thereat; but, after a short time, the exhaustion, not mere weariness, attains its highest degree, till the patients suddenly fall down and are at once unconscious.

Now, for the first time, those about are aroused, and send for a doctor. If this happens in the first stage, the condition is said to be that of gastric irritation, and the physician, from the physiological school, gives anti-gastrics, emetics, etc. If it happens in the second stage, a typhus is diagnosticated, and analeptics, China, etc., are given. In the third stage, finally, a vein is quickly opened, and the doctor thinks he has either an inflammation of the brain or apoplexy to deal with, and declares the patient has been affected by a sunstroke.

But, he who is conversant with the experiments of physiology recognizes in these conditions, from beginning to end, the most striking *similarity* with the conditions *which physiologists are wont to observe where water is withheld in the course of scientific experiments*. Accordingly he advises, in the first stage, water to drink, and rest, instead of the injurious anti-gastrics; in the second, the same, and every day several cold baths, with cold douches while in the bath, instead of the injurious analeptics; in the third, above all things, cold affusions upon the head, till consciousness is restored, and for this, one does not have to wait long. Thus, in every case, deliverance is sure and rapid, while a bleeding robs one, already poor enough in water, of his last drop.

This is once more a strong confirmation of the contents of §. 1. To the reader, it will be apparent, from the foregoing, why the physiological school does not understand how to make use of its own acquisitions and possessions, at the sick bed, and had to be content to wait till, even in this respect, I could inform it better.

But more than this: scarcely were we told of the observation, said to have been frequently made, that just those soldiers were attacked by sun-stroke, who previously had drank water, especially on a forced march, when immediately the illogical inference *post hoc ergo propter hoc* was ready, and the physicians of the physiological school at once issued the most stringent orders, forbidding soldiers to drink water while on a march.

This is another recent product of the lower train of thought which is prone to recur, from any effect, to any previous event, and to take it for the *cause* (as, in the disease of the grapes, the previous erection of telegraph poles was declared to be the cause), instead of considering and perceiving the *conditions* of the case, viz.: that those who had suffered less from the same exertions, naturally did not desire to drink so much; that thus, only those most severely affected, desired to drink immoderately; a sure sign that, with them, a great loss of water had commenced, which, if not adequately repaired, might finally lead to sun-stroke; this would occur if they drank some water, provided they did not drink enough. Hence the soldier while marching, while in motion, *must* drink water; only not so immoderately as to produce too rapid cooling.

This cure of sun-stroke is a purely Homœopathic cure.

For an indication, Homœopathy, as we know, always employs a *comparison*, as here, between the pathological form produced by the involuntary withholding of water, *i. e.*, between the sun-stroke and the pathological form produced experimentally by the intentional

withholding of water; thus, *between the similarity of forms from different causes.*

Thus to every indication according to natural law, not only the usual diagnosis is necessary, but also a *comparison* between the diagnosticated disease-forms and such as are induced by experiment. Only, by this *comparison*, can I so unite them together, that I can synthetically adduce *the law* of specific correlatives, by which action and counter-action of those conditions may be explained in conformity with the laws of Nature. Simply and solely by such a logical procedure is a *differential diagnosis* between the motions from a morbid cause and those from a remedy administered, ever possible.

Any one can see, that, had I known nothing of those physiological experiments, regarding the artificial withholding of water, and *had not comparcd them*, with the disease to be observed, I should scarcely have been able to establish those indications for the cure of sun-stroke, according to natural laws, or to cure it.

But this is just the very essence of Homœopathy, that it elaborates for itself such comparisons (by its physiological drug-provings, for the purpose of a synthesis according to natural laws) of its diagnosis and indication; that hence, as can readily be understood, it keeps itself free from every authority, from every tradition, every empiricism, and, in short, needs no other help than that of the laws of nature and of thought.

We can, on the other hand, gain nothing from the quotations regarding indications, curative procedures or methods, diagnosis or prognosis, nothing even about *Materia Medica*, as I have adduced them in the respective paragraphs from the teachings of the physiological school, nothing which could have relation *to this instrument of comparison* regarding Therapeutics: a renewed proof is herewith presented, of the impossibility of a rational Therapeia in the sphere of this school.

In conclusion, I would further call the attention of the adherents of Hydratics, to the following:

Every Hydropathic treatment, since it produces a powerful alternation of cold and heat, excites an alternation of increased processes of oxidation and reduction, going on *pari passu* within the organism. By the use of cold, the oxidation processes, and by the subsequent heat, the reduction processes are enormously increased. Hence these processes, which, according to the law of proportional oscillation, take place within our body, at any rate, though imperceptibly and at longer intervals, §. 25, are by this procedure forcibly brought to a more rapid alternation, and the greatest intensity.

Hence a more rational treatment to excite the interchange of matter can scarcely be devised. But, for a rational execution thereof, one must know that its centre of gravity, just as in case of the less laborious application of our remedies, rests upon nothing else than upon the induced alternation of oxidation and reduction; that the wants of nutrition and function, at the same time aroused by this alternation, must never be left out of sight for a moment, that here thus the laws of nutrition are of the utmost importance, and that these wants must be satisfied by a suitable amount of food. In this respect, even the so-called hunger-cure, *i. e.*, Semmel-cure [cure by dry baker's rolls] has fallen into great error, for, above all, it should forbid the consumption of fat-formers, since it essentially aims at the reduction of the fat. Banting will drive this so-called Semmel-cure entirely from the field, as soon as he has rectified some chemical improprieties in his rules, *e. g.*, has diminished sensibly the quantity of alcoholic drinks and of coffee, or has forbidden these drinks altogether, and, on the contrary, orders drinks which promote, or directly lead to, the absorption of oxygen.

CURE BY GYMNASTICS.

§. 160.

While the water-cure rests upon regeneration of the molecules and the molecular forces of the *cells*, upon the softening of soluble hydrates, upon excretions, etc., according to the laws of the organic interchange of matter, the gymnastic cure turns its attention exclusively to the re-vivification of *myopathically* paralyzed, or degenerated, muscular tissue, or, of muscular tissue atrophied, atrophied from lack of motion, and to the bony cartilaginous, hence connective tissue, changed in consequence of the development of new formations of nucleolar fat-cells, earthy deposits, etc., and does so mainly in consequence of the discovery and application of the physiological laws of the double motions by Dr. Neumann, and with a result, as firmly established, as the laws of life itself.

The contractive effort of the muscles is not at all to be considered as elasticity; it is, in a state of activity, the product of force and lever; at rest, it is identical with the tensive force or excitability. If these possibilities are lost, then we have, by methodical use of those double motions, stimulation to contraction, to a change in the position of the histological elements, and increase of the interchange of matter, greater

energy of circulation, and, therewith, return of the normal momenta of nutrition. In gymnastic exercises, in swimming, fencing, in brief, in *simple* gymnastics, the flexors alone are always engaged, hence, only half of the entire musculature, which has to overcome the external resistance thereby occurring, while the extensors, without external resistance, remain, in consequence, disproportionally inactive. In the double Gymnastics, on the contrary, the extensors also find their external resistance, and are put into a similar state of activity, since two men use their muscles in such a manner, that one seeks to overpower those of the other, but with moderation, not too violently or too often, hence interrupted by seasons of rest, according to the law of the periodical renewal of the organic motion. These double motions contain the conditions of regenerating myopathic affections, by the production of increased alternate action between flexors and extensors. It is by this means possible to affect every separate muscular group which becomes weakened, and thereby produces the most varied deformities of the bony structure.

A couple of examples will readily make this clear. When Stromeyer hit upon the cutting of the tendons, it was easy indeed to set the club feet straight at once, but the patients walked worse than ever, they trod over. Those muscles which, while the deformity existed, were never called into play, were atrophied, and now, after the section of the tendons, when it was necessary that they should contribute towards maintaining the equipoise of the limb, they refused their service. Hence, the cutting of the tendons is only successful when, after the operation, the atrophied muscles are so far exercised by the two-fold motions and thereby *nourished* again, that they can become equal in power to their antagonists. The apparatus, after the tendons are cut, can, hence, only be looked upon as an accessory to recovery, but the aid, in accordance with the natural laws, comes from the movement cure.

§. 161.

For more than a thousand years physicians have made great efforts to cure tuberculosis of the lungs. Laennec found, at last, that practice with wind instruments, frequent climbing up hills, produced improvement, and even sometimes a cure. But, in tuberculosis, with malformation of the thorax, and curvature of the spinal column, Neumann discovered that gymnastics and practicing respiration, not only removed such malformations, but, with them also, the tuberculosis. In tuberculosis, physical explorations demonstrated, every time, more or less

diminished capacity of the lungs, and chemical inquiry found nothing but that tubercle was at first a hydrate, which, subsequently, in the most favorable cases, might calcify. It has been but quite lately discovered that, not only striking malformations of the thorax and curvature of the spinal column might be causes of tuberculosis of the lungs, but that even where this was not the case, the ossification of the cartilage connecting *the first rib with the sternum*, which, externally, is not perceptible, might be such a cause. Since, thereby, the upper part of the thorax becomes, in early life, immovable, and this obstacle to the motion of the thorax necessarily communicates itself to the other bony parts thereof, the respiratory movements are considerably hindered, and, especially at the articulations of the ribs with the spinal column, reduced to a minimum. In consequence thereof the apices of both lungs cannot properly be expanded for the reception of air, their air vesicles become atrophied and hydrates are quite easily deposited in them and their surroundings. These, in pulmonary substance almost motionless, cannot be absorbed again, and, on softening, undergo molecular or fatty degeneration, suppuration, etc., and form what is called tubercle with its several stages.

The problem of Tuberculosis for this form, as regards its pathological side, is thus solved. With the rarest exceptions, Tuberculosis is produced by this ossification of the cartilage of the first rib, and this is produced by a hereditary pathological interchange of matter. This first condition, the mechanical, may thus be removed by the mechanical respiratory exercises of the movement cure. This may be accomplished not only in this way, that this ossification becomes softened and movable, but, at the same time, after this has sufficiently taken place, by this, that the apices of the lungs may again become permeable to air, and the deposits, which are already in a pathological state, may even be absorbed.

It is not necessary to adduce anything further touching the results of this movement cure, since the laws which govern its employment may be deduced, and from these examples, for all other cases.

ELECTRICITY AND MAGNETISM.

§. 162.

Neither the water-cure nor the movement-cure, neither the use of electricity nor that of magnetism, can be replaced by another method of cure, since they follow their own independent laws, specific to themselves. The movement-cure has already reached a point which

promises so well that the application of external irritation by the electrical induction-apparatus will become superfluous in far more cases than is generally acknowledged.

Since, however, the disturbances of nutrition of a muscle in *neuropathic* paralysis is, in general, a secondary phenomenon, but in *myopathic* is a primary; the cessation of the muscular contraction in neuropathic paralysis, on the contrary, forms the primary phenomenon, and, in case of the myopathic, the secondary; we may thus deduce therefrom the reciprocal relations between the indications for the double movements, or for the electrical induction-apparatus and those similar to it.

Moreover, the induction electricity, as well as the application of magnetism and of the galvanic stream, furnish still further indispensable aids, but sometimes are injurious also, on account of the specifically changed forms of the reciprocal action which they can bring to pass after long use. These belong to the domain of *Materia Medica*, and mention will be made hereafter regarding necessary precautions and their therapeutic significance.

The new discovery in this domain, the use of the galvanic stream, operates far more energetically than the induction-apparatus. The galvanic stream produces such a marked afflux of blood between the electrodes, hence of material of subsistence, which may be easily increased by specific nutrition remedies, etc., that a greater future is before it as a curative means than the school is inclined to think.

In the water-cure, the movement-cure and the galvanic stream, we behold three brilliant stars which, with irresistible force, break through the otherwise gloomy chaos of the physiological school, and are ever to be recognized as imperishable, (since they are acquisitions based upon natural laws,) although they had their origin in experiment only, and that indeed, in the first two instances, in the experiments of men who did not belong to the professional craft. The punishment for this did not tarry, but was quickly applied in the passionate persecution of the water-cure, and the indifferent reception of the movement-cure.

§. 163.

The effect of the induction-apparatus is, however, not only not denied by the physiological school, but is even used by it. But in none of their text books is there any direction for the use of the magnet itself. This is the result of faith in authority, which seeks no further: for, if an opinion is favored by a considerable number of teachers, then the scholars acquiesce in that opinion, believing, as they

do, that their teachers must have very weighty reasons for so saying, else they would never have been appointed as teachers. Lest they should pass for revolutionary minds or over wise boys, they prefer to make the acceptance of the opinions of their teachers a duty. By this means, all odious progress is prevented, and all laborious tests are made superfluous, although it is written, "Prove all things; hold fast that which is good."

Hahnemann always obeyed this latter principle and proved also the effect of the magnet upon man. He announced that, for the proving of the effect of the magnet, the thumbs should be used.

Dr. Streinitz in Gratz has reflected upon this subject lately and gives me the following facts which I can confirm as correct: "There are many neuralgic affections which can be removed most rapidly, surely and permanently by the use of the magnet." From the experience that all magnets display their greatest efficiency in the magnetic meridian, he concluded, that this direction must be also given to the magnet in using it upon the sick. For this purpose a horse-shoe magnet, holding up from 20 to 40 pounds is placed on a table in a direction corresponding to that of the magnetic needle. Now, as the effects of the North and South Pole counteract each other, he concluded further that only one pole should be brought into use, and also that the position of the patient should present no obstacle to the reception of the magnetic influence.

Hence, he directs his patients to place themselves at the north side of the horse-shoe magnet and bids them touch the north pole of the magnet in the direction of the magnetic meridian with the second joint of the flexed index finger. The contra-indications for this treatment are found in chlorotic and cognate conditions; it is chiefly indicated in a congestion of the head and by that condition of the body characterized by cold feet. The success is established; a full explanation of the matter cannot be given for the present; though in the subsequent paragraphs significant explanation as regards the reason of these phenomena will follow.

Of animal magnetism, Valentin says, "All the wonderful phenomena which we have been wont to describe, as the results of animal magnetism, rest upon conscious or unconscious deception, to which even physicians are but too often disposed."

Would that men of science would duly study logic a little bit in order to learn that the dogma is worth as little as skepticism. How utterly unfounded again is this opinion of Valentin. With the help of such subjective subtleties to deny facts observed by others, this truly is the occupation of children rather than those who would be

numbered among the learned. Every child can deny a thing, and to do this lies in the very character of the boy, but to place something different, or truer in the place of it, for this, first of all, an experimental test of the operations of others is needed, before one can indulge in negative opinions thereupon; for every opinion must have an object and cannot be made dependent upon subjective ideas.

Of experimental provings of animal magnetism I add, for the present, only the following, which I learned from Dr. v. Gardos in Pesth, and which I have always found confirmed, in my practice at least, by the most favorable results, and these few I may present without prejudice to the work of this colleague, a work which is about to appear soon, while I may by these brief remarks direct the attention of our colleagues to manipulations, which in many cases will relieve them of great embarrassment. The use of the Homœopathic remedies indicated is not thereby excluded, as it aids and makes permanent the cure. For the removal of a number of neuralgic, spasmodic and similar affections, frequently very severe, v. Gardos does not employ the usual manipulations of magnetisers, with passes, etc., which only make patients *willful*, but kneads (*punktirt*), pressing with the points of his fingers upon *magnetic points* in the human frame which he has discovered. For instance, in spasms, neuralgia, etc., which prevail in the *left side*, he kneads with two fingers of one hand on a line with the navel, three fingers breadth from it, on both sides, and, with two fingers of his other hand, the *protuberantia externa ossis occipitis* on both sides. If these affections prevail on the *right side* of the body, he kneads the middle of the pit of the stomach with three fingers together, in a line, and, at the same time, the coronal suture on both sides, three finger-breadths from the middle, and the great fontanelle. The points for the so-called *cardiac spasm* lie between the cartilages of the seventh and eighth ribs on both sides, on the protuberance of the left frontal bone and on the coronal suture, on the right and left of its centre two finger-breadths. The points for relieving *hysterical* spasms, and all others arising therefrom, for instance, cramp of the stomach, globus hystericus, etc., are the supra-orbital nerves of both sides; here one must knead with both thumbs.

Sometimes the cramps and pains, after these kneadings, vigorously performed, are more severe at first, but one need not be frightened off by that, for by continuous firm pressure upon these places with the points of the fingers, the cramps are not only relieved, but frequently, they do not return again.

Finally, as regards the powerful influence of the *electricity of the earth*, we know that those suffering from so-called nervous affections

are always very sensitive to disturbances of the electrical equilibrium. For instance, before, during and after the last eruption of *Ætna*, February, 1, 1865, the opportunity was given to make comprehensive observations at the sick-bed as regards unexpected exacerbations on the one hand, to be explained by no other cause, and, on the other hand, improvement. That these phenomena really arose from that agent was (by the utter exclusion of any other cause) indicated by the earthquakes, which at the same time occurred in our close vicinity. It was highly instructive to be able thereby to study the constitutional peculiarities which were aggravated, and others, which were strikingly improved, and that, indeed, so suddenly that many patients could clearly indicate the day and the hour of eruption, having plainly experienced it in themselves. In this relation, the provings made by Homœopaths of the effect of electricity upon their own bodies are of inestimable worth for diagnosis, prognosis and indication, where phenomena set in suddenly, and hence it seems difficult to say why the results of these provings appear only in the compilations of *Jahr* and are omitted by *Possart*.

§. 164.

I have always taken particular pleasure in endeavoring, with all the means of the art of observation and of that of experiment, *to cure* just those very diseases which the prevailing physiological school has again and again pronounced incurable, and I have very often succeeded. My colleagues, to be sure, shrugged their shoulders in unbelief, a conduct exceedingly becoming and in place, of course, and offered the most ludicrous explanations. It is worth while to give an example of this, for it belongs to the category of judgment. A female patient of a colleague suffered with an acute attack of gout, in which the two hip and knee joints suffered chiefly, the joints of the feet, hands and fingers less. The very violent pains admitted no other position of the body than the sitting, with the knee placed at an acute angle of the leg and thigh. When the acute process had passed away, and the patient wished to try to change her posture only a little, she observed, to her terror, that she could not remove her limbs from this angular position, and her physician declared to her, that both the hip and knee joints had grown fast in the position previously assumed and maintained till the present; that they were ankylosed. After the patient had passed *three full years* in this painful condition in bed, and her physician had assured her that all the means of art and science had been now used in vain, to make these joints flexible, and that the patient was *incurable*, I was called in, to draw the

cart out of the mire, after it had sunken in deep enough. After a minute examination, and, because, happily, I could discover no injurious medicinal effects, I promised that the use of the joints should be restored within a year. My colleague did not laugh but accused me of charlatanism, without which no physician could take charge of *incurable* cases, and much less give such a prognosis. However, it was summer when I took the patient in hand, and autumn, winter and spring had passed, when one fine day this patient took a walk in the garden without a cane. My colleague, when asked for an explanation of this fact, replied, forgetful very likely of his previous assertion, that she might have walked years ago if she had wished to.

If, in the first paragraphs, it was necessary to make mention of the most common fallacies for caution's sake, this foresight ought also not to be omitted with regard to such *polemical tricks*, which, unhappily, we meet with only too often in the controversies of medical factions, since a great number of learned men are unable to see through them. To this end, I adduce from Schopenhauer the three most commonly used stratagems.

1. *Amplification*. The assertion of the opponent is taken in a wider sense than he intended, or even expected, in order conveniently to refute it in that sense.

Example: A affirms that the English excel all other nations in the dramatic art. B fabricates the apparent *instantia in contrarium*, that in music, hence also in the opera, their acquisitions are trifling.

2. *Fabricating Conclusions*. One adds to the proposition of his opponent, often indeed only by implication, still another, which is related by the subject or predicate to the former; from these two premises he now draws an untrue and generally a malicious conclusion, with which he charges his opponent. *Example*: A commends the French for having expelled Charles X. B replies: So you would have us drive our king away. The proposition added by him, by implication as major, being: All who drive their kings away are to be commended.

3. *The Diversion*. The shifting of the discussion on to another subject, to-wit: to some secondary matter, if necessary, even by a sudden leap. This he now tries to foist upon his opponent in order to contend with him about it, and to make it his theme instead of the original subject. One will accomplish these strategic diversions most skillfully by transferring the controversy unobserved and gradually to some subject standing related to that under discussion, and, if possible, to shift it over upon something having actually some relation to it, much less skillful is it when one retains the subject merely of the

thesis, but brings other relations thereof upon the carpet, which have nothing to do with the question in hand, *e. g.*, if one passes over from the Buddhism of the Chinese to their tea trade, or, one seizes some expression accidentally dropped by an opponent, in order therewith to connect a new controversy, *e. g.*, the opponent uses this expression, "Just here lies the mystery of the thing," when the reply is made, "Yes, if you speak of mysteries and mysticism, then I am not your man."

The diversion is, of all tricks used, for the most part, instinctively by unskilled disputants, the most favorite, and the most employed; and certainly as soon as they are hard pressed, comes forth almost without fail.

These tricks are most frequently met with in hurried verbal discussion, and, as regards verbal disputations, Schopenhauer even makes the following concession: "One should not be in too great haste to abandon his opinion, in order to gain time, hoping that he will yet hit upon good arguments while he is defending himself with poor ones. In this, however, one very easily exposes himself to the danger of going too far, of maintaining too long an indefensible position, and of finally taking a firm stand and—yielding then to the evil of human nature—incurrs the danger of defending his proposition *per fas et nefas*, hence, even by unfair strategem, clinging to it as with his very teeth. Here may every one be protected by his good genius, lest he be brought to shame afterwards."

But this prostitution of the human intellect one meets with not only in verbal disputes, but also in *medical literature*. Thus the assertion, for example, of my colleague, mentioned in this paragraph, belongs to No. 1. Hence I have no occasion to apologize for exposing these polemical tricks; on the contrary, they belong, as we shall frequently see in subsequent paragraphs, essentially to the subject which is to be treated of in this work.

§. 165.

RADEMACHER'S SCHOOL.

If we found in the train of ideas and from the experiments of the physiological school, as well as in their *Materia Medica* and *Pharmacodynamics* (which is entirely without positive contents) not a single point of support, prepared either theoretically or practically for the practice of a Therapy based upon natural laws; if we found, on the

contrary, that its asserted rationality was a self-deception, a *fallacy*, and that its Empiricism really rested *upon primitive experiments upon the sick and false conclusions*; if we found nothing, moreover, which could give security for the success of its treatment; if we perceived, on the other hand, how this school, in spite of its therapeutical and practical impotence, neglects the therapeutics and the adherents of Rademacher and Hahnemann, then it will become a necessity, in every respect, to be acquainted also with these systems of Therapeutics. That each one may judge for himself on this point, I introduce here, also, the authors speaking for themselves, and all the more readily since this Therapy leads us back again to the doctrine of the constitutions of the body.

The author of the text-book of the so-called Natural Science Therapy (Rademacherian) says as follows:

“The use of observations, hence of symptoms and processes of disease, for the formation of symptomatic groups and processes, which receive a name, as, for instance, Pneumonia, Oxaluria, Albuminuria, the stopping short here and setting them up as the object of cure, as well as providing a Therapiea against them, is the characteristic indication of the crudest empiricism, for it limits itself to this, to trace back the changeable phenomena and changing processes to their unchangeable source, and thus neglects the search for that law which contains the essential in the contingent, the necessary in the changing.

It is all the same, whether the phenomena are discovered by the senses merely, or with other aids; on the living or in the cadaver, or, in the products of the disease; moreover, it matters not whether one or more symptoms receive a name, and pass for diseases, which were discovered by the mere senses or by anatomical, chemical or physical investigations, or whether merely the objective symptoms, in their succession, in their processes, or the anatomical and chemical metamorphoses of the blood, and of organs, were united under one name as disease and object of cure; it is ever a crude empiricism, to rest upon these phenomena, to set them up as objects of cure and to employ medicines against them or their processes or against the anatomical and chemical changes of the blood and organs.

The text-books of Pathology and Therapeutics contain a collection of remedies hitherto found curative against forms of disease; but which always cure, which of these should be used in every form of disease, is more or less clearly set forth; and accordingly there follows a greater or less disappointment and complaint about the uncertainty of medical experiences. But this is unjust, because crude empiricism makes observations only, but seeks no law of experience, and knows

also no other experience but this, that one and the same remedy now cures a certain form, and now does not. This negative experience is, in itself, worth nothing, unless it leads to the inference that, henceforth, no remedies should be sought and used against forms or processes of disease, while one abandons the stand-point upon which this experience was made, and thus raises himself up to the stand-point of natural science."

§. 166.

"The foundation for the erection of an *inductive curative method*, which Therapeutics of natural science needs, is the investigation of actual curative relations, *i. e.*, the mutual relation between the essence of disease and the curative remedy.

Hence the proving of a drug upon the healthy can lead to nothing, since, only on the sick, can it be made clear, under what external conditions they became sick. But, from these perceptions it is definitely established, that, in cures and diseases, the main question does not turn merely about their form and diagnosis, *i. e.*, about the localized processes.

The impossibility of reaching any result, by this observation alone, compels the physician to pursue the second path, of which the student of natural philosophy avails himself, if the first gives him an insufficient or only probable answer. He puts a question to Nature; he makes an experiment. The question to Nature runs thus: what is the direct *curative* means for the nature of the disease in hand, which, neither as regards its seat nor its kind, can be perfectly understood from the symptoms alone? With the view to an answer, this question divides itself, according to the well-known laws of experience, into three other questions.

1. Is the original seat of the disease an organ, or the blood, or both? and does the disease hence need an organ-remedy, or a blood-remedy, or both?

2. If it is an organic disease, which organ is primarily affected?

3. In what manner is the organ or blood diseased, and which of the known organ or blood-remedies is to be used?"

§. 167.

"The phenomena of the disease in hand most carefully examined and comprehended, to the minutest details, with all the aids of the diagnosis of forms, the supposition, or certainty, arising therefrom, as

regards the seat of the disease, the similarity of these phenomena with such diseases, whose seat and kind have already been found out by investigation, and finally, the *epidemic character*, give the points of support from which a logical hypothesis, touching the seat and nature of the disease, may be established, and according to which an organ-remedy or blood-remedy, previously discovered, may be selected.

It is self-apparent that therapeutic experimenting is learned by practice, and by continuous practice becomes easier; however, in this, all tendency to speculation, to so-called rational conclusions, must be banished, as well as that mysticism which is known under the name of practical tact. Then only can that practice lead to mastership.

The most essential support, in this most difficult and most important task of the physician, springs from the consideration of the *epidemic character* in a therapeutic view, especially in acute diseases, in which it is of the greatest interest to shorten the attempt at cure, or even to dispense with it altogether. It is an approved and certain axiom, that, many essences of disease appear only in epidemic extension, so that one, under various forms and symptoms, for a certain period, lasting moments or years, attacks a multitude of men. Hence, if the primary seat of the disease, and the kind of the disease is recognized, in those first affected, then the instituting of experiments of cure, for all succeeding cases, ceases; and the physician knows with certainty, that he can cure all new cases, with the remedy discovered, without any, or, with very rare exceptions.

In old, chronic diseases, the previous epidemic constitution is, above all, always decisive, and, on this account, in every chronic case which comes up for cure, we should inquire into its first appearance, as far as possible; it thus often happens, that, if we know the then epidemic remedy, we know also the primary seat and the primary kind of the diseased process, and this remedy will also complete the cure, if a cure is possible at all, or if some other kind of disease of the affected organ, or of the blood, or the disease of some other organ has not already taken place. But even in this latter case, this knowledge gives the point of departure of the entire chronic affection, and thus, according to pathological data, offers a more ready recognition of the present diseases of organs, or of the blood."

§. 168.

"The human organism will remain in equipoise as long as normal external influences, normal nutritious substances, and normal atmospheric air are offered it, and these follow a series of metamorphoses in a

normal manner, and, at the same time, the metamorphoses, through the organs of the living organisms, are normally accomplished. If this equipoise is disturbed it may happen from the side of the nutritive canal, the air and the organs. Consequently, the following may appear as objects of cure: 1. Disturbances of the nutritive material within the intestinal canal, before it is converted into blood, as well as diseased matter, poisons, parasites introduced with the blood or directly. The latter may also form objects of cure in other parts of the body, where they are accessible. 2. Disturbances of the blood, as the first results of materials of nutrition and of the air. 3. Disturbances of organs which, as integral parts of the organism, complete the metamorphoses of the nutritive materials and of the air. Furthermore, those essences of disease are also objects of cure, the process of which may spontaneously disappear, since it is the object of the direct curative art, not to treat every affection, but to shorten its duration and modify its course. The indirect art of curing abandons such cases to themselves, because it can not produce their direct subsidence, and is not in condition to recognize, and cure, the essence of the disease."

§. 169.

"In order to learn what may be known of the essence of disease it is necessary to discover what upon the whole can be learned from the essence of bodies in nature. On this point, chemistry alone gives us light, and teaches us, that we can find out nothing except their relation to other bodies. *Just so we know nothing of the essence of disease except its relation to certain external bodies of nature.*

The re-agents against diseases of the blood are *Iron, Copper and the Nitrate of Soda*. At the same time, however, when Iron cures disease of the blood, there are also various organ remedies which are indicated in preference, and the same is true of Copper and the Nitrate of Soda.

§. 170.

According to another author of a work upon this, as he calls it, Specific curative method, "there are three specific morbid states of the human body, which characterize themselves by this, that they assume a definite position as regards remedies.

To the remedies of the *first* specific series of Natr. nitric. belong also Sal ammoniac, Natr. carb. and Natr. and Kali aceticum, Borax and Venesection: to those of the *third* series of Iron belong the preparations of Iron, bitter vegetable astringents, China, Lichen island.,

Columbo, Red wine, Ratanhia, with Muriatic acid, Alumen, etc. Most drugs correspond to the *second* specific state under the lead of Cuprum; thus, amongst others, Quicksilver, Arsenic, Iodine, Calc. carb., Sulph., Ipec., Bell., Op., Aconite, Digitalis, Tart. emet, etc. There are also *transition remedies* from one state to another and for the combination of two or three specific states. Venesection is, in general, injurious, where the second or third specific states prevail."

§. 171.

"The specific *contingent qualities* of specific means are quite peculiar if they remove a disease, since they indicate thereby, that they have a greater relation to the pathological form than to specific states, but these cures are always liable to relapses and not infrequently the diseases are made worse by them.

If, for instance, Sal ammoniac corresponds to the cure of diseases of the organs of respiration, it takes place only in so far as these diseases then represent pathological forms, under which the first specific state itself commences; if Digitalis corresponds to the cure of the same diseases, this only happens under the pre-dominance of the *second*, and, if Iron cures these diseases, it occurs under the predominance of the third specific state. On the contrary, we can cure fever and ague with Quinine under circumstances under which the third specific state does not appear; a diarrhœa, with Opium, without the presence of the second specific state, but these cures are *uncertain*, temporary, relapses follow, more serious diseases, or, the fever and ague becomes aggravated, at the cost of the contingent qualities of Quinine, the diarrhœa at the cost of the contingent qualities of the Opium."

§. 172.

"The entire diagnosis rests here, it is true, upon the indication *ex juvantibus et nocentibus*, but a larger practice finally decides, as it permits the comparison of several similar cases occurring at the same time; and, moreover, as regards the stationary character of the disease, certain forms of disease, as a rule, only appear under determinate specific states.

The inflammations appear in the time of the first or of the combination of the first and second specific states; typhus and chronic diseases seldom or only under the first specific state; intermittents, for the most part, form a pathological form, under which the third specific state appears isolated, or the combination of the second and third

ensues. Nevertheless, from all this it follows, that, in order to arrive at the end, there is, in fact, *no certain way*, and, in short, we are compelled to throw ourselves into the arms of empiricism."

§. 173.

The exclusive measures are also peculiar:

"1. One adheres, losing sight of the pathological form, to the *relative rank* of the remedy of the appropriate specific series, and, at the outset, takes therefrom one which stands high.

Thus there follow, in the second series: 1, Tartar emetic; 2, Cuprum; 3, Mercury; 4, Arsenic; 5, Bismuth; 6, Zinc; 7, Lead; 8, Kali iodat; 9, Iod.; 10, Calcareas; 11, Magnesia; 12, Sulphur; 13, Ipecac, etc., and one takes, for example, in acute gout, Sublimate, passing by the remedy particularly corresponding to this pathological form, or else the benumbing method is chosen. If, for example, we have to treat a pneumonia, under the combination of the first and second specific state, then the chief object would be, first to subdue the first, and then the second state; hence either to give Nitrum or to bleed, and then follow with Tart. emet. Instead of this, we can *benumb* the first condition with large doses of Tartar emetic, omitting bleeding and the Nitrum, or bleed more copiously than usual and not give the Tartar emet. In the same manner remedies of the third series may easily benumb those of the first. From similar relations compound drugs may be useful, although this procedure is contrary to rule." This writer permits resort also to other methods even.

§. 174.

Of the specialities which Dr. Latz has discovered, I mention the following: Diseases of the bones are treated like chronic eruptions on the skin; hæmoptysis, like diseases of the respiratory organs; vomiting of blood, like diseases of the gastric organs; Syphilis is a form which generally belongs to the second specific state; Nervous fever generally presents a pathological form, under which the first specific condition does *not* appear; Intermittent fever, a form with which the combination of the third or second, or the third alone appears, and China corresponds to the latter. Chronic diseases seldom present pathological forms, among which the first specific state appears. Troubles, which are connected with convalescence from acute diseases, are very often the expression of the prevalence of the third specific state."

In connection with these indications, Dr. Latz, as regards various methods, gives, among others, the following points of support: "*The method of bleeding* is excluded by the prevalence of the third specific state. If too much blood is let, the diseases take on the asthenic character, and this is very often the expression of the third specific state, less often of the second.

The *exciting* method is excluded by prevalence of the first specific state.

The *diaphoretic* method is a supplement of the previous.

Of the *acid neutralizing* methods, Kali or Natrum is indicated by the prevalence of the first specific state. Calcareo and Magnesia by that of the second.

The *hematogogical* method is excluded by the first specific state.

The *cholagogic* method may be used under the prevalence of either specific state. In the first, it is advisable to use the tartrates; in the second or third, Chelidonium, Rheum, etc.; Taraxacum in the combination of the first and second.

The *diuretic* method also comes into play in every specific state, and it is advisable in the first to use Tart. boraxat.; in the other two, Levisticum, Squills, Juniper, etc."

The dose in which these drugs are to be given, is that established by the physiological school, with certain cautions, "in order to avoid the casual effects—vomiting or purging, *i. e.*, the requisite medicine must be given in a small dose. To be sure, one must not go to extremes here, or fall too far below the normal dose, lest the curative principle becomes a *principle of folly*, [*Narren princip.*]

"One begins with a small dose, and increases it gradually, till he has attained the normal dose. In this manner we seek to accustom the stomach and bowels to the remedy, etc. This normal dose is, for example, two drachms of Natr. nitr. in six ounces of water, a table-spoonfull every two hours; Cupr. sulph. grvj., Sacch. ʒj., a teaspoonfull four times a day; Tr. ferri. acet. aeth, ʒss.; Tinct. Stramon ʒj.; Tinct. Opii. ʒss.; gtt. xlv. or more, four times a day."

§. 175.

In this quotation, the question of the normal dose comes up also, and, unhappily, with a discrimination between a curative principle and a principle of folly, with which latter a thrust is made at Homœopathy, just as the physiological school serves the adherents of Rademacher. But we may be fully assured that whenever a common place has crept in, it had to be used on account of the incapacity to

furnish proof or counter-proof, a dangerous thing for those who resort to such weapons. The command which is not preceded by knowledge, the detraction and using of slanders which lack knowledge, these are by far the easiest and most common occupations of life. The most acute reasoning, the most cutting irony deserves to be heard, if, for their support, the proof has preceded them, without which both fall back upon the giver. That should not be forgotten which we have proved in the first paragraphs regarding the proof from the mental association or from the domain of convictions and incomprehensibilities. Party and science represent two contradictory stand-points, mutually excluding each other, as do faith and knowledge. To this decision, throwing a doubtful light upon learned men, the whole machination and all the results of the strife between the various therapeutic schools reduces itself, for which strife, in the Forum of Science, there is no excuse.

Whoever dares to hold an opinion of his own, is condemned and declared an outlaw; this is still the custom in Therapeutics. But where should we stand to-day in astronomy if Galileo, Kepler, and Newton, had not been of a different mind from Ptolemy?

§. 176.

Rademacher and his adherents made at the bedside the first practical perceptions, empirical though they were, of ætiological relations and their mutual relations to Pathology and Therapeutics, long before it ever entered into the head of the physiological school to think thereof in good earnest. But if we compare the probable conclusions of the physiological school with the experience of this, which might be called the *ætiological school*, then we see that the first, uses various substances as drugs, upon the strength of accidental results of single experiments, upon the advice of others, from tradition, without having any kind of support at all like a rule.

The procedure of this ætiological school permits us to infer still more than what lies in the summing up of perceptions merely. The change of the genius of a disease is a fact long known; but the *empirically* discovered fact of the connection of various remedies therewith, is a fact *newly discovered*. This ætiological school, hence, depends, truly enough, likewise, upon the occurrence of similar cases, but it upholds no *hasty principle* like that of *contraria contrariis curantur*, but offers a rule, a leading principle, according to which it can practice. It discovered a *mutual relation* of the outer world with diseases, and of both of these, with one single remedy, by which relation, from the

various external processes, which accompany the nature of the phenomena, it could determine just those which contain the reasons for the indication of its remedies.

§. 177.

The adherents of Rademacher compared the cases of disease which were curable with Iron, and found, that, in this, the most various forms of disease corresponded. Subsequently, again, they compared the same forms at the same place and under the same circumstances, but, at another time, and found that they no longer corresponded thereto. Thus they discovered by the *eliminating method of the art of observation*, that the causes of this difference could not lie in the forms of disease but must lie outside of them; and, since place and circumstance had remained the same, but their drugs had to be changed with *the time* alone, in order to gain the same curative results with the same forms of disease, they concluded that sometimes the causes of these changes are different, and, that, by these differences, other conditions of disease must invariably be brought about.

That this school interrogates Nature, and by observation and experiment seeks an answer, that hence its indication is formed by the collection of similar cases, and any change therein is regulated according to the result *ex juvantibus et nocentibus*, this indicates its standpoint, to wit, that of *empirical induction*, to which *such* rules are peculiar. But, from the *grouping together* of similar cases, it only follows with mathematical certainty, that a conformity to rule lies at the bottom of similar cases, but that *this rule* itself is not thereby yet found.

Herewith, hence, their *inductive* series of conclusions ceases; for that this school ascribes those causes to atmospheric changes, etc., is an *abstraction*, which points to a natural law, and contains an appeal to search for it. This law is all the less known, as even Dr. Latz, an adherent of Rademacher, as well as Rademacher himself, has discovered that all did not depend upon the *specific genius of the disease*, but that also separate forms of disease, under similar specific states, but independent from and not influenced by the epidemic genius of the disease, are wont to occur inter-currently.

Nevertheless this school possesses inventive means for its Therapœia, of which the physiological school has shown no example, as it was never able to make a therapeutic discovery of such magnitude and such significance. The former, hence, needs no longer to rest upon the fallacies of a numerical method; it lays hold of *ætiological causes*

and conditions of disease, and the fact that it has found such, remains its everlasting merit. §§. 71-81.

§. 178.

Rademacher and his adherents, in order to establish their indications, proceed thus according to the laws of the *higher train of thought*, not according to those of the lower, nor according to the *custom* of expecting the return of similar cases. In this regard, they stand far higher than the adherents of the physiological school. For the former, even *one* case suffices to enable them to conclude from it to the rest, without even having seen it. That is the characteristic of *abstraction*, §§. 33, 89, which permits them to anticipate a law of nature.

These conclusions, the disciples of Rademacher can hence no longer form inductively, and their concluding that herein also they proceed inductively, is an error which checks their progress.

Not the repeated occurrence of similar phenomena, but the unfailing cure of the most *varied forms* of disease by a remedy, consequently by *specifics* at a definite time, contains the indication of a specific cause; although they themselves do not, as yet, know these causes, yet they have found a law of reciprocal effect, to which their cures can be referred. Just as we did not know the foundation of the law of gravity, as long as its effect was abstracted from the reciprocal movements of the heavenly bodies within space, so has Rademacher also, abstracted a law of effect and counter-effect, from similar reciprocal movements of external conditions to diseases within time, and, although he has not given it a name forthwith, yet, from no side of science can any objection arise which can attack the logical propriety of his conclusions. According to this, he has founded an empirical *Therapeia*, and his pupils have already worthily completed it. It is the duty of every practicing physician to study these faithful indications and to improve them wherever he observes deficiencies.

§. 179.

That to the adherents of Rademacher the natural law is yet unknown which controls their therapeutic inventive means, is clear from the fact that they have no leading principle wherewith to find it. They lack the *unit* from which they should begin such investigations. Their abstraction throws them into the midst of changing conditions from which it seems impossible to extricate themselves. Hence their

methods of treatment at the bedside rest for a long time upon experiments. To these, therefore, they have adhered, because, contrary to the art of experiment, they have built no harbor, from and into which, they could sail. They labor often upon the high stormy sea, upon which they can hold themselves only with the sail and the anchor of *post hoc ergo propter hoc*.

They further discovered that, even in *chronic* diseases, it did not depend upon the accidentally *present* form to establish a right indication, and found, at the same time, one reason thereof; the other we shall learn subsequently. Finally the hints as regards the *series of remedies*: as regards the uncertainty of cures, if the remedies were chosen from their *chemical relations* to any pathological forms; as regards the benumbing method, will be heartily acknowledged by every practicing physician. But the assertion that "the essence of disease was only a relation to certain external bodies of Nature" is not clear. For the essence of all things is never grounded in their relation to others, but in their *cause*, and, if Rademacher and his adherents had not made this false conclusion, they would also have been led, just by the success of their Therapy, to the *causes* of the changing epidemic character, as it is styled by them.

If we further compare this Therapy with that of the physiological school, it rejects also the distinctions between purely empirical, empirical and rational treatment. At the same time, we see it freed from dogmatism and skepticism, and directing itself, by its leading principles, by experiment and observation. According to this Therapy, diseases are not mere predicates, but their idea is extended by reference to their *ætiology*. This constitutes the general feature, according to the nature of which every special disease is produced. Here, therefore, the reality is already connected with its necessity, and therein consists its undeniable advantage over the physiological school. §. 149. I do not doubt, even for a moment, that every *busy* practitioner, in those few therapeutical rules of this *ætiological* school, will have perceived many momenta which explain to him results previously inexplicable, and show him the reasons of many of his failures.

Thus, by way of comparison, this *ætiological* school has far outstripped the physiological in Therapeutics, and, therewith, also has proved the impossibility of giving a description of any pathological form for the purpose of a *special* therapeia.

The only misfortune, by no means to be underrated, for the Therapeutics of this school, consists in this, that it is compelled to make its experiments first upon the sick, on which account this

empiricism cannot be fully defended on grounds of utility and humanity in every respect, since there can be no remedy offered for mistakes.

§. 180.

But, if the question arises, what is or wherein, in reality, consists the normal dose? no one from these two schools can answer. On this point, the most that they can do is to declare that the essence of the normal dose is authority or tradition. But, in the natural sciences, both of these factors are null and void. If, however, the adherents of Rademacher, as well as their brethren of the physiological school, mean to speak of a *normal dose*, they should, since their aim can be directed only to the *degree* of the reciprocal effect, previously demonstrate that there exists also a *normal intensity* of every form of disease, and what. §. 120. Since truth can be but *one* in any science, the existence of parties is the evidence of prevailing ignorance—manifesting itself in each party in opposite direction only—so long as they can exist side by side. Each side certainly possesses arguments in its favor, but only arguments of perception (*rationes cognoscendi*) for the opposite party, §. 73, which cannot be binding for any one. We have, in the prevalent strifes, within therapeutic circles, nothing but the repetition of strategems, fallacies and bravados, as they were brought to view as long ago as the days of Galileo, and this, the teachers of Therapeutics seem to have forgotten. Where there is strife in any science, the two arts, that of experiment, and, that of observation, should settle it; instead of persecuting each other, the disputants should openly join each other for the mutual, and, hence more prompt, solution of the contested points.

§. 181.

Even in Rademacher's school a great error against the art of experiment was committed. Both he and his pupils had, for instance, notwithstanding the assertion in §. 166, made provings on themselves with Copper, Iron and Natron nitricum, which, in their bearing upon the drug provings of all schools, contained nothing new, but, nevertheless, contained one fault, to-wit: they did not announce, false to their ætiological principle, *at what time, i. e., to use their language, at what epidemic constitution they had undertaken them.* They must acknowledge, if they would be consistent, that a physiological proving of these substances, thus a proving upon the healthy, of Iron, for instance, at a time in which diseases were curable with Iron, would

have presented *quite different results* than at a time in which they could be cured with Copper or Natron nitr.

Since they have neglected this essential announcement, it is clear that it never occurred to them, that the relations thus changed, which they observed on the sick, could have any influence upon the healthy. This mistake arises from their assertion, that a just relation between a drug and the essence of disease could only be found out empirically. But on what account, then, have they considered necessary, and undertaken physiological drug provings?

§. 182.

One experience gained by this school is worthy of special consideration, "that, in old *chronic* diseases, the previous epidemic constitution, always decides, first of all, upon the present indication of a remedy; hence, in every case, which comes up for treatment, the time of its first appearance should be learned, as far as possible, for, by this, frequently, if the then epidemic curative remedy is known, the primary seat and the primary kind of the diseased process are known also, and this very remedy will still effect a cure, if a cure is yet possible, or, if the disease is not already succeeded by another disease of the first affected organ or blood, or if disease of another organ has not ensued. But, even in this latter case, that knowledge gives the point of departure for the whole chronic affection."

That is in gross, what we see happen on a smaller scale, after strong or oft-repeated doses of long-acting remedies. First appear symptoms at the point of application, then, of its reception in the blood, finally, the affections of the specifically affected organs and systems in succession, and, often, at great intervals, as we have observed very distinctly with quicksilver, for instance. The only difference consists in this, that epidemic injurious influences, often after very many years, to the surprise of many, bring to view their *continued operation* as a token of the presence of their results under various forms of disease, while the continued operation of drugs is of proportionally shorter duration.

In this experience there lies a very important momentum for the favorable or unfavorable results of the practical activity of a physician, and for the art of his observation. Thus it is not sufficient to study the specific forms of reciprocal effects, into which a drug enters with the organism *only during its use or during the proving of it on the healthy*; it is just as necessary to trace out, at the same time, those specific forms of reciprocal action, into which the so-called epidemic

constitutions enter with the organism, and which manifest their effects for years to come, since, thereby, the more or less susceptible bodily constitutions suffer greater or less changes. In this behoof, Rademacher's school justly requires of its adherents to direct their observations chiefly to these epidemic reciprocal actions, in order to strike out a path for the *historical* establishment of a Therapeia.

§. 183.

For the sake of comparing with Homœopathy, the above-given description of pneumonia by the physiological school and the Therapeia presented for the same, as well as for a closer insight into the foundations of Rademacher's Therapeutics itself, it is necessary, also, to give full quotations concerning three forms of Pneumonia, one of which is usually cured by blood-letting and Saltpetre; another by Iron; the third by Copper; they are taken from a monograph upon Pneumonia by the author of the text-book of Therapeia based upon Natural Sciences, by Dr. Kissel.

DESCRIPTION OF EPIDEMICS OF PNEUMONIA, WHICH HAVE BEEN OBSERVED.

"Till now I have never had opportunity to study, in their epidemic extension, Pneumonias which are curable by cubic Saltpetre. Even our literature treats of none such, since, till now, only the Nitrate of potash has been used, and that always in connection with blood-letting. Since, however, these means have an effect similar to that of cubic Saltpetre, I take the liberty to present an epidemic in which they have been used, and in which they have presented clear indications of curative power. At the same time, it appears, therefrom, that blood-letting is not injurious in all kinds of Pneumonia, but only under that prevailing at present which is curable either by Iron or Copper, and that, hence, the results given by Dietl, touching the effect of venesection upon Pneumonia, hold good only of such epidemics as were prevailing at that time.

a.—PNEUMONIAS CURABLE BY VENESECTION AND SALTPETRE.

In Hufeland's Journal (Bd. 3 S. 441 ff.) Schmidtman treats of an epidemic of pneumonia, which prevailed in and about Melle in 1795, and in which blood letting produced effects entirely opposite to those occurring in the pneumonia observed by Dietl. Since the use of this means, and of Saltpetre (not cubic) was, in fact, followed, if not by

all, by nearly all the criteria of cure, as far as they could be known without physical examination of the lungs, we have hence reason to suppose that this epidemic pneumonia was one which was curable by cubic Saltpetre. The symptoms thereof offered, in the totality of the cases, as far as they could be given by Schmidtman, without the methods of physical exploration which were not then known, a striking difference, compared with those of the now prevailing epidemic which are curable by Iron and Copper.

An acute chill, often lasting several hours, for the most part, opened the scene, followed by an almost intolerable heat, which then generally continued, without interruption, to the end of the disease. In some few cases, the disease set in at once, with great fever, without any chill; sometimes, again, in the course of the disease, a chilly feeling, alternated with the fever. Often during the chill even, but usually after the fever, the symptoms of the chest appeared; in some cases they manifested themselves only after the fever had continued for twelve or even twenty-four hours. In no case did I notice that the peri-pneumonic symptoms appeared before the fever. With all patients, the respiration was more or less difficult and oppressed; many complained merely of a pressure, a tension, a distressing sensation of weight in the breast, as if an anvil pressed the chest together; often, but not always associated with this, was an acute, burning heat behind the middle of the sternum; a deep inspiration was just as impossible as it was to hold the breath, drawn in as deep as possible, for a long time. Hence, those who suffered the most, found it very difficult to speak; they were able to utter only a few interrupted words at a time, as one does who has run himself out of breath, and they could swallow drinks or medicine only in small, interrupted draughts, since they could hardly do without the air as long as it took the fluids to pass over the epiglottis.

With many, however, the speech was not hindered. Some felt merely an acute stitch in one side; now in the right, now in the left, from which the respiration became extremely painful and difficult, so that, for the sake of relieving the pain, they drew only short, scanty, spasmodic breaths; all were more or less oppressed, distressed, extremely restless, and this in proportion to the severity and duration of the inflammation.

Some few excepted, who suffered only from very acute stitches in the side, all were affected with a violent, tormenting cough, which very much increased the pains in the chest or side, the oppression and the distress. With many, the cough was, at first, dry, but soon became moist; at first the expectoration was like saliva, as in catarrhal

cough, but as the disease inclined to abate, it became yellowish, lumpy, pus-like. With many, the cough was moist at first, the expectoration colored with streaks of blood; often it was mere blood; indeed, in many cases, the disease took on the form of hæmoptysis, accompanied with all the pathognomonic symptoms of a peri-pneumonia. This happened chiefly in the months of September and October. In the course of the disease, in both cases, both blood and expectoration disappeared—this latter then became yellow and pus-like. As the patients inclined to recovery, the cough became less frequent and milder, and the expectoration was proportionally less. Since the patients were so distressed and restless, they seldom lay upon either side; yet, as a rule, lying on the affected side, was the most comfortable. The symptoms of the chest, to wit, the oppression, the pressure, the weight, the pain, or, the stitch in the side, etc., were always present, without interruption, in the same degree of severity, if the means used effected no remission or cessation. Yet I have treated two cases where these symptoms, before any remedy whatever was used, frequently intermitted, for half an hour, on the third and fourth days of the disease. The hot breath, which some writers ascribe to pneumonia, I have not been able to detect by sensation, any more than Frank, yet I have never tried it with the thermometer. With those whose symptoms indicated a high grade of inflammation, the thorax was scarcely elevated at all, or very irregularly, now more, now less, while the abdomen was raised, and moved all the more actively and powerfully; a proof that respiration, and, especially the expansion of the cavity of the chest, was accomplished by the diaphragm. Many complained of violent pains at the vertex, but others again did not. With many, the eyes were slightly inflamed, swollen, shining, but with many I observed nothing unnatural in this respect. With most, the face was hot, deep red, as if colored with Cochineal, and with those who suffered most severely, and who were near to suffocation, it was puffed up and swollen, as in men who are strangled. Yet I have also seen it, in several cases, pale, lead-colored, and collapsed, although all the symptoms indicated the most intense inflammation. In many, even at the outset, the face dripped with sweat, without producing the least alleviation. Only a few talked deliriously, at the greatest height of the disease, or mumbled in a more quiet manner. Most complained of sleeplessness, some appeared as if intoxicated, and slumbered, as one affected with apoplexy, undoubtedly a result of the impeded return of the blood from the brain, to which a free passage through the lungs was denied.

Only with a very few, have I seen the tongue quite clean; in most cases it was dry, covered with a white or yellowish mucus, chiefly at the root, and this coating, in some cases, was as heavy as is ever seen in bilious or mucous fevers. In case of four patients who were in the most critical condition of any, in the greatest height of the disease, the tongue, the palate, the inside of the cheeks and the edge of the lips, were covered with a brown or black crust, as is seen in bad cases of putrid fever, and actual fissures were in the parts above mentioned, in which the raw flesh could be seen. In many cases, even the substance of the tongue seemed to be swollen and puffed up. With most, the taste in the mouth was undisturbed, like that in health, or mucous; some complained of an extremely bitter taste, accompanied with nausea and inclination to vomit, though the disease was not of a bilious nature, nor was its character dependent upon the bile. It played only a symptomatic, secondary part, and was merely an effect of the irritation produced by the inflammation of the lungs and transferred, by sympathy, to the biliary system and the stomach. Bleeding, and the most active antiphlogistic treatment, removed these casual symptoms as surely and as quickly, as it can be done by the anti-gastric method of cure alone, when, in other cases of disease this talisman of our time plays the principal part. Spontaneous, bilious vomiting, I have, however, observed in none.

In the case of an aged man, who had been formerly a great drinker of wine and brandy, but for some years had refrained from this habit, undermining his health, the breath had an unsupportably putrid odor, which disappeared after three venesections. In case of three patients who, on account of the violence of the disease, came near suffocation, I finally observed, after favorable and saving crises had set in already, a very painful excoriation and inflammation in the pharynx, so that they could hardly swallow; demulcents soon relieved these troubles.

But few had any appetite during the disease; most of them evinced a disgust for food, but the thirst was all the greater and more unquenchable. Many complained of a distressing jumping and throbbing of the heart. In no case have I noticed the pain, the tension and distension of the abdomen which Frank mentions. The stools were generally hard, sluggish, inclined to be constipated, and, in the height of the disease, were exceedingly offensive, as they are wont to be in bilious fevers. In some cases the disease began with diarrhœa, but this soon yielded to the antiphlogistic treatment.

The urine was, with some, at first, straw-yellow, like that in health, but, in most cases, it was of a fiery red, without sediment, but when

the disease approached its crisis it threw down a precipitate which, at one time, looked like brick-dust — at another, like pus.

With all, the pulse was abnormally accelerated, giving 100 or 120 and even 150 beats to the minute, except in the case of a young man of sanguine temperament, who complained of inexpressible internal heat, and whose pulse was but 80 per minute. In other points it was very changeable and unsteady, and hence, by itself alone, was never considered by me the indication for my doing or leaving undone. Those who were tormented only by symptoms of pleurisy had almost always a full, large, broad, jerking, hard pulse; as soon, however, as peripneumonic symptoms were added to these, the pulse was smaller, thinner, suppressed and hard. In those cases in which the peripneumonia had attained its highest degree of intensity, and threatened suffocation, it often intermitted and was so small that it almost eluded the touch; the extremities, at the same time, were cold, pale and almost insensible. In these cases a copious venesection made the pulse regular, freer and fuller again, and in the former, smaller and thinner.

The heat was as great in this disease as in *febris ardens* (*calor mordax*); many felt almost like a burning coal, and the whole surface of the body was bloated. Of none of my patients can I say that their fever was a *Febris continua continuens*, for, with all, I observed slight though only short remissions, which occurred at no particular time. The exacerbations were usually the worst towards night. Some complained of an insufferable pain in the inward parts, and these endured the most.

I have already mentioned that, in case of those who were near suffocation, and where the circulation in the lungs had ceased, the extremities were cold.

In only a few cases the blood drawn by venesection, on cooling off, showed no inflammatory buff upon the surface. With all others it was present, and of various thickness, two, three and even four lines thick, and so tough that it could hardly be cut through with the strongest knife. In some cases, upon the first bleeding, this coat was not seen, but always appeared with the subsequent ones.

The continuance of this disease was uncertain, and I have never observed definite days on which the crisis appeared. The bodily peculiarity of the patient, the violence of the disease, assistance rendered early or late, properly or improperly, had the greatest influence upon the shortening or lengthening of the disease. When I was called as early as the first or second day, then often as early as the fifth, sixth, seventh or eighth day, favorable crises ensued, and all

tokens of inflammation ceased: with others, in whose cases the inflammation attained a higher grade and had struck its roots deeper, or where my aid was sought on the fifth, sixth, seventh day, or even later, the inflammation lasted to the ninth, tenth, eleventh, twelfth and even fourteenth day. Yet I must say, in compliance with truth, that, in many cases, the disease took a turn for the better spontaneously on the seventh day. The crises consisted chiefly in general warm sweat (which often continued several days, with intermissions), in a yellowish concocted expectoration (*sputa cocta*) and urine, having a brick-dust or pus-like sediment. In some cases the improvement ensued by means of sweat alone, and, with the disappearance of the inflammatory symptoms of the chest, the cough also disappeared; consequently no expectoration ensued. In case of a woman who was pregnant, and who was attacked with spitting of blood and all the symptoms of inflammatory peripneumonia, and whom I was obliged to bleed copiously five times, all the cough disappeared, and the disease resolved itself, on the twelfth day, merely by a hypostatic urine. In no case have I observed a critical diarrhœa at the crisis of the disease. Nor were any of my patients affected with critical hæmorrhages, but I knew of a young peasant, who had entrusted himself, when suffering with a most violent attack of pneumonia, to the curative powers of nature, where the crisis occurred on the ninth day, with an extremely copious spitting of blood, and, what is remarkable in the case, his lungs ever afterwards were, to all appearances, perfectly healthy."

Of sixty-eight patients whom I treated in this epidemic two only died, the one a woman, 68 years old, on the 15th day, and the other a man, 58 years of age, in the seventh week, with hectic symptoms. The other sixty-six patients, as far as I now know, have entirely recovered, without any consecutive disease. Only twelve of these were women, the others were all men from eighteen to sixty-six years of age; the most of them were strong healthy men in the prime of life. Children I have never seen affected with this disease. Several of these patients had had, some weeks before, a catarrhal cough, which they had neglected; others had previously suffered with frequent attacks of *pleuritis occulta*. Although the appearance of these patients indicated lungs affected with tubercles, yet the disease took a favorable course, and the symptoms of the occult inflammation disappeared with those of the phlegmonous. In one case only, rheumatism of the knees occurred, after the appearance of which the symptoms of inflammation of the lungs vanished at once. Although two of the women were in the third or fourth month of pregnancy, yet no premature birth followed the violent fever, and the necessarily copious bleedings, and they both went on favorably with their pregnancy. In

one case, dropsy of the skin and the chest occurred at the same time with the pneumonia, and yet the patients fortunately recovered. The recovery was almost incredibly rapid after this violent disease; several patients from whom I took from forty to sixty ounces of blood, performed their usual duties within two or three weeks again without any difficulty."

§. 184.

b.—PNEUMONIA CURED BY IRON.

"The epidemic pneumonias observed by me, which were curable with Iron occurred between December, 1847, and September, 1848, and, during the epidemic of a changed character, which followed the former, three more cases of the former kind appeared. Twelve of these cases were also connected with hepatic complaints, which were then prevailing epidemically, and which were curable with *Nux vomica* water. In the succession of cases there was no increase or decrease to be observed, so that it seems that the intensity of any separate case depended, not upon epidemic, but upon individual causes.

Before the beginning of the fever, precursory symptoms often appeared for several days, which consisted in a sense of weakness, lassitude, headache, diminution or loss of appetite, and, with children, sometimes in vomiting. The chill, which always occurred in the evening was sometimes only a creeping, but, at others, and, generally, a shaking chill; however, it never lasted long, half an hour at the longest, and was never very severe. The succeeding heat was variable in the same degree; sometimes quite moderate and decidedly remitting in the morning, sometimes, and generally, continuous but seldom burning. Though the skin of the patients felt hot, when it was first touched, yet this impression ceased, under contact of several minutes duration. Usually, even with the accession of the chill, or heat, or soon after, never before, the patients complained of oppression of the chest, cough and stitches in the side, which in some cases continued or even increased in violence, but in other cases became more moderate and, in the earlier days, were endurable. It depended upon this, whether the patients sought help early or waited till these pains became insufferable. The dyspnœa especially, the most important symptom for the patient and the most annoying, varied much; I have never seen it, however, increase so rapidly and unexpectedly till it amounted to a sense of suffocation, as in the pneumonia curable by copper. The oppression was quite endurable in the first days, and

increased gradually when exudation took place. The stitches were now in the right side, now in the left, but generally in the latter. I never observed, in these cases, pressure under the sternum or a feeling of a heavy weight upon the chest, as in pneumonia curable by Copper, and, as a general rule, the patients curable by Iron, did not suffer so much as those curable by Copper. The other symptoms of a general sickness were trifling at first; at times patients complained of some pain in the forehead; confusion of the head or a feeling of stupidity, slight pains in the limbs and lassitude. Even the complications with affections of the liver produced no further objective phenomena. The tongue, in simple cases of pneumonia, as also under the above-mentioned complication, was mostly either quite clear and bright red or had a thin yellow coat. In the course of the disease the tongue was sometimes dry in severe cases, and, in more aggravated cases, it sometimes had a dark brown coat, before the use of the Iron. A thick yellow coated tongue I generally observed only where there was an acid state of the intestinal canal; this required *Nætrum carbonicum*, after the use of which it disappeared in a day. The appetite failed entirely at first, but gradually rallied again after one day's use of the remedy. There was more or less thirst, but it was never very severe.

The color of the face was not changed in the slighter cases, but, in the more severe, it was always pale; a few times only I found the conjunctiva yellow in connection with hepatic complications. The features underwent no change in slight cases, but in the severer, the change appeared very early. In children, the eyes sometimes grew dim after a few hours, and, after a day or two, they lost their sensitiveness to light, the eyelids dropped as if paralyzed and the children could not raise them. In adults, the countenance collapsed till it became hippocratic after several days, or assumed an apathetic, settled, drowsy expression; in those cases, however, in which the dyspnœa reached a high degree, it expressed anxiety and restlessness. The speech corresponded entirely to these various circumstances. The palates of all the patients were either a clear, yellowish or dirty, white. With children under two years of age they were wrinkled, and, together with the adjacent parts of the inner mouth had quite the color of newly fallen snow.

The skin felt, as already stated, hotter at one time and cooler at another; at still another time its heat varied but little from the normal temperature; it was never continuously burning hot, but was never cool and moist as in pneumonia curable by Copper. The pulse was from 80 to 240 in adults, and was generally small, thin or soft, empty; sometimes apparently full and jerking. Its fullness disappeared under

moderate pressure. I have never observed a truly full and hard pulse. In children under two years of age it was thready, fleeting, not to be counted. Several times, in very severe cases, it intermitted. During the first nights, the sleep of the patients was very restless and they frequently had distressing dreams.

The stools were consistent and brown in pure pneumonia; when complicated with hepatic troubles they were, sometimes, of the same character, but frequently, also, diarrhœic, and of a gray or bright yellow color. The urine, in pure pneumonia, was of a bright yellow or gold color, clear or turbid, but, in case of the above mentioned complication, usually of a Madeira-wine color or reddish, clear or turbid. In both cases it had a feeble, sour re-action sometimes; at others, it was neutral or alkaline.

The respiration was affected in the most various degrees; in the lighter cases it was hardly more frequent or shorter than in the normal condition, and, only when attempting to take a deep inspiration, did the frequency of the respiration increase for a short time, together with the sense of pain. In the severer cases it was often very short and frequent, sometimes, however, but little changed, and these were the cases in which the patients were not conscious of their condition. Children under two years groaned and sighed, as early as the first two days, and their respiration was extremely short and frequent, so that they were not able to take the breast. At first, the cough was seldom, but increased somewhat during the period of exudation and during the absorption produced by the remedy; the cough was annoying, only in those cases in which the dyspnœa had attained a considerable height. The expectoration, at first, was usually entirely wanting; in the lighter cases, during the exudation, it became tough and of the color of mucus; in severer cases it assumed a rust or chocolate color, intermixed with streaks of blood. The use of the remedy soon removed this latter, and thereupon, it became of a mucous color again, of globular form, and was easily detached, though it was never discharged in copious quantities.

Percussion gave a dull sound in all cases, even before exudation took place, and usually at the posterior wall of the chest, and in the axilla.

Auscultation gave, in the beginning, an indistinct, feeble or murmuring sound, either alone or accompanied at the same time or soon after, with a crepitant râle; or, if pleuritis were present, a friction sound immediately manifested itself. Only once, at the beginning, did I observe a whistling and snoring in the right lung, in a very slight degree; this disappeared within two days, and thereupon these symp-

toms presented themselves in the left lung. Crepitation occurred either on the first or the second day; in one case only, which began with typhus symptoms, did it appear on the fifth day of the disease. From the third to the fifth day, more seldom on the sixth, as also in the case just cited, bronchial respiration and bronchophony set in, which, under the use of the remedy, disappeared entirely in a day, or, at the furthest, within three days.

The duration of the pneumonia, in sixteen patients, was from three to nine days, and, in three, which were complicated with symptoms of typhus, from ten to sixteen days. In eighteen cases the result was complete recovery, and in one case, that of a child six months old, it was death. I was called upon to save this child, who also suffered from the epidemic hepatic affection, on the fifth day of the disease. It died on the ninth day, in the stage of undissolved red hepatization. Sequelæ never occurred. The ages of the patients were from three months to eighty years.

If the drug was used in the first days, the phenomena were mitigated at once, as well as the whole course of the disease, which was decidedly shortened. If the remedy was not used till the third day, symptoms of exacerbation had already set in, such as are peculiar to the natural course of the disease before the occurrence of exudation, as, for instance, persistent unconsciousness, sopor, manifest decrease of muscular force, sliding down in the bed, quiet delirium, rolling of the eyes, insensibility of the pupils, and convulsions, with loss of activity of the senses, and, in case of children, of consciousness.

The duration of the cure, when commenced within the first three days, was, according to the severity of the individual case, two, three, five and seven days; in one case, with typhus phenomena, it was thirteen days; if the treatment commenced from the fourth to the eighth day, it continued two, three, four and five days, and, in one case of pneumonia typhosa, nine days.

The criteria of the cure, the duration of which depended solely upon the early use of the remedy, announced themselves by the shortening of the duration of the disease, in comparison with that of the natural course of pneumonia, and also by the prompt and constant removal of pathological phenomena, by the absence of exacerbations, together with the so-called crises, and by the absorption of the exudation already deposited, or by the prevention of its occurrence. The general feeling of the patient first improved in such a manner that he often felt that he was better before the objective signs corresponded therewith. The heat of the skin was diminished on the first day; the pulse sank after the remedy had been in use twenty-four hours, from 140 to 80, from

from 100 to 66; the thin and empty pulse became somewhat full; the jerking pulse quiet and regular; the muscular powers increased after the first day; the stitches disappeared in from one to three days; the appetite was partially restored after the first day; the thirst was less or disappeared entirely. This disappearance of the symptoms was hence quite different from the natural course of pneumonia, in which they persistently increase till hepatization occurs, and then suddenly cease. Dietl remarks this especially as regards the pulse, while I have observed several times that the pulse, which, by reason of the effect of the remedy, fell, during the exudation, from eighty to sixty, rose again to one hundred or one hundred and ten after absorption ensued, and during the rapid absorption produced by the drug.

The remedy consisted, in pure pneumonia, in the daily exhibition of an ounce of the acetic tincture of Iron, prepared after Rademacher's directions; in cases complicated with hepatic disturbances, one and one half drachms of *Nux vomica* water were used at the same time, which sufficed to cure these epidemic hepatic affections, then prevailing."

§. 185.

C.—PNEUMONIAS WHICH WERE CURED BY COPPER.

"All the cases of pneumonia which fell under my notice, from the middle of September, 1848, to July, 1850, with three exceptions, were curable by Copper. Their number was ninety-three. Thirteen of these, since even these forms always underlay the epidemic character, were complicated with an affection of the liver, curable by *Chelidonium*, sixty-eight were pure pneumonias and twelve were complicated with liver disease, curable with *Nux vomica* water. At one time they presented the picture of pneumonia more clearly, at another, the results of physical examination of the chest showed a complication of pneumonia with bronchitis. The intensity of the individual case varied as with all epidemic diseases; yet I could not, on the whole, observe any marked increase or decrease of it, so that the conclusion seems to be justified, that the intensity was somewhat individual and not dependent upon the epidemic character.

Before the febrile affection set in, some, though but few, had, for several days previous, a cough without expectoration, which was not very troublesome, or they had diarrhœa, and this, indeed, occurred not only at the time of the prevailing hepatic affection, but also in the pure pneumonias. Afterwards a severe chill always occurred in the evening, which was commonly a shaking chill, and very seldom was

a mere cold creeping over the back. This was followed by a severe burning heat, after an hour or more, which either continued undiminished till morning, or made but a very trifling remission.

The patients complained either of stitches in one side or pressure under the breast-bone or of nothing whatever. The stitches were for the most part felt on the left side, and on the right side but eighteen times. Sometimes they appeared only with the cough, not on deep inspiration, though usually this latter was not possible on account of the acute pain. Sometimes the patients did not complain at all, from the first to the fifth day, and only afterwards, for the first time, the pains set in with greater or less violence. Children under three years naturally made no complaints, and auscultation alone could determine the seat and character of the form of the disease. The stitches themselves by no means corresponded to the affection of the lungs, for sometimes this latter was observed on the very first day, and the former were lacking, or, *vice versa*, the stitches were present while auscultation announced nothing abnormal. In these cases, however, even at the very outset, percussion gave a sound, in a circumscribed portion, duller than in the healthy side, usually in the posterior-inferior part of the thorax, or in the axilla. But even if the disease extended, as it did several times before the use of the Copper, from the left side of the chest to the right, I never observed stitches in both sides, but only in the left. Sometimes the patients complained of stitches in the side and pressure under the breast-bone at the same time, and these were the severest and most dangerous cases. Sometimes complaint was made only of the latter, and even then the attack was severe. Then, either at first, or in course of the disease, shortness of breath, oppression of the chest or a sense of suffocation was associated therewith, and these symptoms often came on so suddenly and so violently that the patients could remain only in a sitting posture in the arms of their attendants, thinking, the while, that they should suffocate, since they could draw nothing but short and hasty respirations. In these cases, I found, on auscultation, only a little sibilant rhonchus in one or both sides of the chest, together with an indistinct, feeble respiratory murmur, and always a pale, dingy, collapsed countenance.

Sometimes their sufferings, in the first eight days, appeared so slight to the patients, and free from danger, that they sought no help till quite suddenly this danger of suffocation set in, and compelled them to seek for help as soon as possible. With adults, who presented to the ear the symptoms of bronchitis, or of broncho-pneumonia, there were sometimes no complaints about stitches or pressure; but only the general complaints were made, about the general febrile symptoms,

such as lassitude and headache. The former was always considerable, the latter, except when complicated with liver affections curable by *Chelidonium*, was trifling and in the frontal region.

Pain in the belly was only complained of sometimes under hepatic complications, never in pure pneumonia. In case of acidity of the intestinal canal, there was also, sometimes in the outset of the disease, vomiting of quantities of sour or bitter tasting mucus, at times of lumbrici even.

Appetite was always wanting, and thirst for cool drinks was considerable. The color of the face was generally of a dull grayish hue, dirty light gray, seldom reddened. The features remained normal, at first, if there was no severe pain in the side, or oppression of the chest. Only a few times did I observe in the evening-exacerbation a deep red, heated looking face, and brilliant eyes.

Nose-bleed occurred only once on the right side, and that under hepatic complications curable with *Chelidonium*.

The tongue had generally a thin yellow or whitish coat, and was moist; it was less often dry, cracked and brown. Sometimes it had a thick yellow coat, without the presence of acidity in the intestinal tract, just as is also the case in pure pneumonia. If this coating, however, were present, and the patients complained, at the same time, of nausea and bitter or sour taste, there was then always an acid state of the intestinal canal. These were, at the same time, the cases in which, sometimes, the febrile affection began with vomiting, so that if the stitches in the side and the objective chest symptoms were lacking, one was entirely unable to suspect, much less to recognize, the presence of pneumonia, till the progress of the disease made the matter obvious to the senses.

The palate was always red, only shading off into dirty yellow or white. I have never seen it as white as in pneumonia curable with Iron.

The skin was, at first, dry and burning hot, but, as the disease progressed, it either became moderately warm, dry and flaccid, or, sweating and cool, especially at the extremities.

The sweats were moderate, sometimes clammy, and often smelt very sour. They usually set in, when the disease was left to nature from six to eight days; I never saw them under the use of the remedy from the first to the third day, but, in that case the symptoms of the disease gradually remitted, and no new ones were added to them. If one should call those sweats critical, the assertion would lack every evidence of truth, for, with the commencement of this sweat, the

patients did not improve, but felt worse, and not only so, but they were also worse, as the objective phenomena demonstrated.

The pulse was, in most cases, small, thin, empty, soft; in case of children, often thready. Sometimes it was jerking and soft; sometimes moderately full; never really full or hard. It was always quite compressible, though the combination of the jerking and moderately full pulse, made it seem, at the beginning, as if this might not be the case. In one case the pulse intermitted at the sixth or tenth beat. With adults its frequency was from 100 to 140; with children, running up even to 220. The more frequent it was, the smaller and thinner it felt, and, at the same time, the more compressible.

The stools were sometimes of normal consistence, and occurred every day, or every two days. In one case there was no stool for five days. But, generally, there was disposition to diarrhœa, or, more or less diarrhœa was actually present. Usually this set in from the third or fifth day, if the disease had, to that time, been left to nature. These diarrhœic stools generally occurred three times daily, though sometimes, especially with children, as often as twenty times. At one time they were pappy and fœcal; at another, watery or slimy. In pure pneumonia their color was always brown; but, under hepatic complications, often bright yellow; and, in children, white or whitish yellow. The urine always had a sour re-action; in one case only was it neutral, and, in this case, there was some chronic affection of the chest. Its color was usually that of straw, or somewhat darker; seldom light yellow, like old wine, and, only a few times, blood red. When it was first passed, and was yet warm, it was clear and transparent, or merely wheyey or cloudy. After standing for some time, sometimes even for an hour, it usually became turbid and frequently deposited a fine reddish sediment, clinging to the vessel, and consisting of uric acid.

When the disease was complicated by affections of the liver, curable by *Nux vomica* water, the urine was, at first, in several cases, of a Madeira wine color, but became of a bright yellow after one or more days, and deposited its sediment only after cooling. Thick flocculent sediments, with bright yellow turbid urine, I have only observed a few times.

The respiration was, at first, usually quiet and without pain, unless too deep a breath were drawn; sometimes, however, it was short, anxious and painful at once; sometimes also, as above-mentioned, a sensation of suffocation was present or set in suddenly somewhat later. On the second day, however, it frequently happened that it became quick, short, panting or rattling, groaning or sighing,

especially with children. Sometimes it was loudly snoring, with a thick hoarse voice. This aggravation occurred sometimes not before the fifth or eighth day, if the disease were left to itself.

The cough was at first seldom, trifling and attended with no expectoration or a scanty, thin mucous one. As soon as the remedy began to produce a palpable improvement, the cough was stronger, not much more frequent and brought up thick mucous sputa. At first, it had a whooping sound, later a rattling. With little children, it was known by this alone, that the expectoration had undergone a change, for generally, as is known, they swallow what they raise. Only in the worst cases was the expectoration rust-colored or mixed with blood.

The results of auscultation and percussion were as follows:

Sometimes, at the very first, abnormal sounds were noticed, and a dull tone, sometimes not till the second, or even the seventh day. Usually the sound on percussion was then dull, even though no abnormal sounds were to be heard. Mostly the left side was affected, corresponding to the seat of the stitch; sometimes both sides were diseased from the first, or the affection extended itself in its progress from left to right. In one case, on the sixth day of the disease, under very intense general symptoms, only very insignificant physical phenomena were observed, that is, only a dull sound and a murmuring respiratory sound.

Percussion always gave a dull tone, even then when no abnormal sounds were to be observed. This tone was generally observed posteriorly and under the axilla, less frequently also upon the anterior surface of the chest.

The results of auscultation consisted in a murmuring respiratory sound, in crepitation, bronchial respiration, in vesical râle, sibilant and mucous rhonchus and, when connected with pleurisy, in a friction sound.

The crepitation appeared but seldom and then usually in the axilla; the murmuring respiratory sound was more frequent, sometimes alone, sometimes connected with bronchial respiration. This was always confined, except in the first four cases, to a portion of the posterior thorax, which might be covered by a hand or two; it was feeble and came as from the depths. This was seldom heard pure and by itself; a sibilant rhonchus or vesicular râle in other parts of the chest was almost always connected with it, while, at the same time, the ear perceived, as if coming from the surface, normal or murmuring respiratory sounds. Even the vesicular râle was observed only in small circum-

scribed spots, always succeeded the bronchial respiration, and was usually connected with sibilant rhonchus.

This latter, however, usually appeared strong and widely diffused; a mucous rhonchus generally followed it; however, I have observed cases also in which, after the disappearance of the former, no further sounds were heard. This was the case, however, only when the rhonchus was not heard over a great space and not very loud. With children, the mucous rhonchus was usually strong, followed soon after the first, and involved the whole chest, and was often so strong, that by laying the hand upon the chest its intensity could be appreciated by the motion which it gave to the hand.

The succession of the sounds varied also as much as their first appearance. Sometimes a sibilant rhonchus appeared first, then the bronchial respiration followed. Then on the next day there was vesicular crepitus where there had been a bronchial respiration, and this again where there had been sibilant rhonchus. Or else bronchial respiration appeared at first, with or without perceptible crepitation; then vesicular crepitus or sibilant rhonchus or both. In the cases in which I perceived nothing to-day, for instance, but to-morrow, bronchial respiration, it was to be presumed, that, on the evening of the previous day, there had been crepitations, which did not come to my notice, since in these cases, which were usually slight, I only visited the patients in the morning. The disappearance of the bronchial respiration always occurred in one day, and after that, either the normal respiratory murmur was heard or vesicular crepitus, or sibilant rhonchus on the next day. This latter, however, disappeared more slowly. It usually lasted from two to four days and then crepitation and bronchial respiration either came first and vesicular râle or mucous rhonchus or the normal murmur.

As regards the separate days, the origin, combination and order of the sounds were observed in the following manner.

On the first day, sometimes nothing, sometimes at once sibilant rhonchus or a murmur or crepitation.

On the second day, sometimes nothing, sometimes sibilant rhonchus, in both sides even; posteriorly, absence of the normal sound, and, between times, sibilant rhonchus; sometimes a mere murmur; seldom crepitation.

On the third day, sometimes nothing; sometimes bronchial respiration, though no abnormal sound preceded it on the morning of the second day; frequently, bronchial respiration and sibilant rhonchus in different parts at the same time; the first disappearing in one day, the last continuing for several days; sometimes sibilant rhonchus alone,

which, on the next day, was accompanied by bronchial respiration; in one case pleuritic friction sound from the fourth rib downwards posteriorly and in the side, to which *rhonchus sibilans* was added, on the fourth day; sometimes bronchial respiration, which had been preceded, on the second day, by a murmuring sound.

On the fourth day, sometimes nothing; sometimes bronchial respiration alone, or, at the same time with *rhonchus sibilans*; the former deeply seated; superficial feeble respiratory murmur; *rhonchus sibilans* alone; this in connection with crepitation and disappearance of the latter within two days; continuance of the former and transition of it into *rhonchus mucosus*. Sometimes crepitation only in the axilla, thereupon, on the fifth day bronchial respiration in the same place; on the sixth, disappearance of the latter, and, in its place, crepitant râle, disappearing on the seventh day.

On the fifth sometimes, but seldom, nothing; usually, bronchial respiration anteriorly, with sibilant *rhonchus* posteriorly, or, both posteriorly, so that the latter was perceived as the chief sound, and now and then, a weak bronchial respiration, as if coming from deep-seated or distant parts. Sometimes this occurred with bronchial râle on the edges, which râle had been preceded on the second or fourth day by a sibilant *rhonchus*; sometimes the latter appeared alone, or a mucous *rhonchus*, preceded by the former on the fourth day.

On the sixth day sometimes, though but two or three times, nothing at all or a murmuring respiratory sound; usually sibilant *rhonchus*, yet alone; a few times a bronchial respiration, if the former had been present on the previous day; sometimes crepitant râle preceded by bronchial respiration.

In one case, on the seventh day, commencement of the pneumonia with crepitation but generally, cessation thereof [of the pneumonia] and of the bronchitis, according to the early use of the remedy; sometimes, however, there was a mucous *rhonchus* or crepitant râle or sibilant *rhonchus* between.

From the eighth to the seventeenth day, there was still either bronchial respiration or crepitant râle, with sibilant or mucous *rhonchus* in cases which had been neglected.

Both the duration of the disease, and the prevention of symptoms of aggravation, depended entirely upon the early or late use of the remedy. If the remedy were not used at all, then, sooner or later, symptoms of aggravation set in. Decrease of muscular power sometimes occurred as early as the second day, but generally only from the first to the fourth, fifth or sixth day.

Labored speech occurred on the sixth day.

Violent palpitation of the heart, a more small and frequent pulse, a greater degree of coolness of the skin, moist cold skin, cold sweat, appeared from the fourth to the sixth day, in connection with greater difficulty of respiration, especially with children. Sopor in children, apathy, difficulty of hearing took place as soon as the second day.

Delirium, at first at night, and, afterwards, during the day, I observed also sometimes as early as the first day, but generally not till the third. Likewise stupidity and confusion of the head. Collapse of the countenance usually occurred not before the eighth day, but with children sooner.

The respiration, in case of adults, became difficult slowly and only in the severest cases, but, with children, it often became, as soon as the second day, more tight, short, panting, with more difficult, sighing, heaving of the chest, with suffocating cough, purple hue of the face, etc.; to these was added that condition of the pulse and heart, in which the stroke of both became constantly more frequent, till, finally, that of the former could hardly be heard, and that of the latter hardly felt. Once I found, beside the usual connection of pneumonia with bronchitis, a combination of the latter with laryngitis, once with pleurisy.

Once, after the disease of the chest had been cured in three days by Copper, after it had already lasted fourteen days, varioloid followed, thus on the seventeenth day of the disease; this was very mild, however, and under the continued use of Copper, disappeared, after the second day, without fever or sense of sickness.

As regards the symptoms of pure pneumonia, and that with hepatic complications, I have observed nothing which has not occurred with all of them alike, except the pain in the bowels, and the changed color of the stools, which, as already noted, where there were bilious complications, or, in the so-called bilious pneumonia, were bright yellow or white.

When left to itself, the disease lasted three weeks, *i. e.*, cases continuing as long as this, came to me for treatment, since they had not spontaneously recovered up to this time. The remedy, however, could decidedly and always shorten the disease, without the appearance of any crises, according to the intensity of the case and the earlier or later use of the remedy."

If the case came up for treatment on the second day, the cure followed in two or three days; in severer cases, in from four to six days. Aid was sought, for the most part, on the fourth day. The cure then followed from the third to the fourth day; less often from the fifth to the sixth; once, in a very remarkable and severe case, in nine days.

Even in children one year old, when the cure was undertaken on the fourth or fifth day, it was completed in three or four days, where one or both sides were affected, and there was already sighing and groaning respiration, a small pulse hardly to be counted, together with frequent and watery evacuations. When commenced on the sixth day, it lasted sometimes six and sometimes seven days; commenced on the eighth day, it lasted, in light cases, three days. In the ninety-three cases, with the exception of four, which terminated fatally, recovery always occurred in the time noted.

The four fatal cases have already been spoken of, when treating of the influence of the remedy upon the manner of death. Of the patients more than half were children, and these cases were not only greater in number, but also in severity, than those of the adults.

The little patients generally suffered very much after the fourth or sixth day of the disease, if, prior to that time, no help had been obtained. Both the physical symptoms as well as the general phenomena, showed how severely they were affected; the pathologico-anatomical condition of the bronchi, as it has been made known by physicians, who have had opportunity to make many *post mortem* examinations of such cases, makes it clear enough, that this affection arises from the localization of the general disease; thus, then, the bronchial mucous membrane, since children presented more marked symptoms of bronchitis than of pneumonia, was thickened, swollen, and the cavity of the bronchi was filled up with exudation, by which the air-passages were thus narrowed from both sides, and partially closed. Hence arises, since children do not possess the power to raise the expectoration properly, the short, oppressed, panting or rattling respiration with difficult expansion of the chest, the increase of debility, the blueness of the face, sopor and delirium. However, the two latter phenomena are not always consequences of restrained circulation in the lungs, since I have observed them in children, even on the first or second days, before the symptoms of the chest had attained to such an advanced state, and they must be ascribed to the influence of the general affection upon the brain. Sometimes these cerebral symptoms had the same impress as that which is comprised under the name of acute hydrocephalus, and, even without affections of the chest, I have often seen the same at a time when diseases prevailed which were curable by Copper. The remedy for the simple disease was Copper, in the form of the acetic tincture, in the daily doses of a drachm and a half for adults, or in somewhat smaller doses, when there was violent diarrhœa. Where there was an acid state of the intestinal canal, I first gave Natron carbonicum with four grains of Cuprum oxidatum

nigrum as a daily dose for adults. One daily portion of this was always enough, so that, on the next day, the tincture could be given. In complicated cases, which occurred only during the prevalence of hepatic complications, curable by *Chelidonium* and *Nux vomica* water, a scruple of the first-named medicine was given every day, in the form of tincture, the latter in dose of a drachm every day in combination with the Copper. If this were not done at once, though the symptoms of the pneumonia were improved, the coating on the tongue, the appetite, the diarrhœa, the stool being mostly light yellow, showed no change. The effect of the remedy showed itself now, as I have already set forth, not only in shortening the duration of the disease, but, also, in the rapid removal of the subjective and objective symptoms, and in the prevention of any exacerbation.

As soon as the remedy was used, an improvement set in at once, and, even in the four cases which terminated fatally, there could be no doubt that there was an improvement, at first, as in all the other cases. The improvement always occurred first in the subjective symptoms. First, the patient felt that he was better; he felt more quiet, less anxious and more cheerful; then the stitches decreased, the oppression of the chest and the sense of suffocation, and they soon ceased entirely. Usually, that is, if the remedy were not given after the fourth or sixth day, this happened within twenty-four hours, and, indeed, I have had cases in which the patient himself has declared that he felt, with every dose of the Copper, that he was easier and better, even when, afterwards, the symptoms of the disease of the chest were still found unchanged.

The stitch, it is true, decreased sometimes after the first day's use of the Copper; but it continued then three days till it quite ceased or several times a little longer than this. That was a sign that it had come to be the chief affection of the part involved and then a fly-plaster relieved in twenty-four hours.

Several times, in these cases, I have also applied Zinc plaster, but never found the prompt relief from it, that the former afforded. If, after the drawing of the blister, the pain had not entirely left, I then applied the Zinc salve upon the sore with prompt results. This latter, as a rule, is the more suitable after a fly-plaster, than the mere application of simple cerate, because, under its use, the wound of the skin, which is unnecessary, and, as is well-known, frequently occasions various troubles, is now quickly healed.

After using the remedy three days, all the subjective symptoms of the disease, and a part of the objective, were usually removed. Of the latter, the pulse and the heat or coldness of the skin were the

first to improve. If the pulse was very frequent, small and thin, it became slower and somewhat fuller; if the skin were hot, it became moderately warm; if cold, it became warm again. Then disappeared the brain symptoms, which were sometimes present, as delirium and sopor. Later the urine and stools became normal, and, at last, the chest symptoms usually disappeared, after having been already changed from day to day, as has been already stated.

The earlier the remedy was used, the quicker was the whole disease removed; the later, the slower, especially if the symptoms of aggravation had already set in. But even then I observed a regular progress towards improvement, and a general remission of the aggravation.

Thus the last curative effect was this, that, when used betimes, the remedy prevented the exacerbation, as its action was so prompt, that the exacerbation could not take place. In conclusion I add, that I have seen no crises, since they cannot occur as exacerbations proper to the natural course of the disease, where a real curative means develops its power."

§. 186.

"Now, if I compare the symptoms of the ninety-three cases of pneumonia, curable by Copper, observed by me, with those detailed by Rademacher and Bernhardt I must acknowledge that there is a similarity between them.

It is remarkable that the cases which appeared immediately after the last of the pneumonias curable by Iron, *had so great a similarity in form to these that they were only distinguished on attempting to cure them*; on the contrary, all the following possessed, more or less a peculiarity which could not escape the careful observer of the entire epidemic. It is further confirmed by all observation, that the pneumonias, curable by Copper, as well as those curable by Iron, or Saltpetre, appear for a certain longer or shorter time, epidemically, by means of which both the physician and patient have the advantage of a rapid and certain cure. I had observed the pneumonias curable by Iron from the fall of 1847 till September, 1848, and, from that time, till July, 1850 the diseases appearing under this form were curable by Copper. In 1850 I observed only a few *exceptions*, as I also noticed one during the continuance of the pneumonias curable by Iron, and it seems to me, that the four fatal cases were no such exceptions, since, in all of them, manifest improvement was produced by the use of Copper. If this had not been the case, I should have tried

either Saltpetre or Iron, according as the symptoms corresponded to one or the other."

Rademacher gives the following as the symptoms of pneumonia curable by Copper:

"Light delirium, visible decline of muscular power, the urine but seldom red, more frequently gold- or straw-yellow, soon becoming turbid and acid, somewhat violent heat, variable thirst, stitch in the side, more or less severe from time to time, difficulty of breathing, which was produced, sometimes by pain, and, at others by a compressing feeling in the middle of the thorax; cough, usually with bloody expectoration.

Bernhardi mentions as a peculiarity of this disease, the special participation of the bronchial mucous membrane, manifesting itself by sibilant rhonchus, a more insidious course and less of the vital turgor of the skin.

All these symptoms I observed in separate cases but not in all. That would, however, be against the order of nature, manifesting itself in everything, since nature everywhere includes degrees and series of degrees. It is the case here, as with any other epidemic disease; no two cases are the same, they are only similar; on this account, no disease can be known from the single case, but from the totality of the cases, or at least from a certain number.

The observer certainly obtains here a definite general picture of pneumonia, curable by Copper, and perhaps the reader also, if it were possible to the former to be entirely clear to the latter. And, further, from the observation of the entire epidemic, a sum of phenomena presents itself, which establishes a very precise distinction between pneumonias cured by Iron, and those cured by Saltpetre. In the quantitative character of the cases, this distinction is not, indeed, to be found, since, with the last named diseases, the same takes place, but on the contrary in a few qualitative properties, perceptible by the senses. As Copper, Iron, and Saltpetre, are qualitatively very different objects, and some of these differences appear by the comparative reaction which Chemistry presents, while others are known by their physical properties, so will it occur also in cases of disease which can really be cured only by one of these substances. There must exist qualitative differences, of which one or the other, by further inquiry, becomes gradually apparent to the senses, and thus useful to the physician.

"What I have thus far observed of this matter, and that without chemical and microscopical investigation of the morbid products (an opportunity which I hope to enjoy hereafter), is the following:

First, I remark that I intentionally have not separated the form of pneumonia from that of bronchitis and pleuritis, in my description, because they were not to be pathologically separated in the affections curable by Copper, and therapeutically they were substantially the same. If the physical examination of the chest showed a pneumonia to-day, it was often the case that, on the very next day, or certainly, in a few days, a bronchitis presented itself to the ear, and conversely the former followed the latter, or, both appeared together.

Of the subjective symptoms, I can neither adduce the oppression of the chest nor the sense of suffocation as characteristic, since I have observed both even in pneumonia curable with Iron, but I may adduce the sudden occurrence of the latter, in many cases, and furthermore, the stitch in the side, so often occurring for the first time on the sixth day.

Of the objective symptoms, I have not often noted the wrinkled, moist, or, cold skin that we notice in pneumonia curable by Iron, or the strongly acid urine becoming turbid on cooling, and precipitating Uric acid. Nevertheless, these phenomena have not occurred in all cases, and, indeed, not even in the most of them. On the contrary, in the most, and, indeed, in all except the first, immediately after the disappearance of the pneumonia curable by Iron, auscultation presents the following characteristic result, viz.: the small extent, the slight degree of the crepitation and bronchial respiration, the rapid disappearance of both, the alternation and connection of the same, with the sibilant and mucous rhonchus.

Whether the isolated occurrence of the bronchitic form in pneumonia, curable by Copper, is characteristic of it in distinction from that curable by Iron and Saltpetre, the future must determine; I, at least, have never seen the same take place in the diseases curable by Iron. With the pleuritic form, the case is different; this, I have often observed in the disease curable by Iron, and once in a case curable by Copper.

The course and accession of the physical symptoms of the chest likewise offered something characteristic. The former was frequently slow, insidious, not so rapid and violent as I have observed it epidemically in pneumonia curable by Iron, and as it is said to be in that curable by Saltpetre. The physical symptoms frequently appeared not before the sixth day, after that, the febrile condition seemed no longer to indicate that pneumonia and bronchitis would be formed.

Thus, whoever steadily observes the entire epidemic, compares all the cases with each other and does not cling too scrupulously to a few single differences of form, cannot have failed to see, after the experi-

ences already laid down, that pneumonia curable by Copper, as a whole, has peculiar phenomena, manifest even to the senses. He will discover the same, though probably not in the first case, with demonstrable certainty, yet, certainly in the second and subsequent cases, even without any attempt at cure; or, if he undertook the cure it would be with greater precision and certainty; he would by no means—clinging to the form of pneumonia as a disease, yet without any definite reason, and led only by something like an obscure instinct—attempt to cure after bleeding, Saltpetre and Tartar Emetic had not helped but aggravated, at one time with Lead, at another with Opium, Arnica, Digitalis, Senega, etc., in arbitrary mixtures, in a crude, empirical manner, and not according to any scientific method, nor would he leave the disease entirely to itself, believing any cure by art to be impossible.”

§. 187.

At the first glance, we discover the great difference between those forms of pneumonia which are curable with bleeding and Saltpetre, and those curable with Iron and Copper.

First, I will merely remark, that, according to the author of the Manual of Therapy according to natural sciences, the task which he sets before himself to find, for the two latter forms, differences equally stringent, is, strictly speaking, in opposition to the principle of this school; for, as we have seen, all *forms* should be indifferent to it as regards Therapeutics. However, I approve of this oversight, on grounds which are given in the first paragraphs. *For what does it matter, whether the subjective opinion turns out thus or otherwise; the main thing is the fact and its connection with a natural law.*

Hence, if the difference of forms in one and the same disease, in different individuals, and at various times, cannot be lost sight of entirely for therapeutic purposes, the author, from whom I borrow this extract, had he been aware of the fact, would have found the necessary indications for discriminating between the pneumonias curable by Iron, Copper, and Nitrum, in the drug provings of Homœopathy. As an evidence of this, I adduce the following from his own statements touching this disease, which, by reason of the Homœopathic drug provings, can much better characterize the pneumonia curable by *Iron*, than anything which the writer himself could adduce.

“In pneumonia curable by *Iron*, the dyspnœa never rose so rapidly and unexpectedly to a sensation of suffocation. In most cases, it was quite endurable during the first days, and began gradually to increase

only when the exudation took place. Pressure under the sternum, or a sense of weight upon the breast, was not observed as in pneumonia curable by Copper. The patient never complained of oppression of the chest, and cough and stitches in the side, before the chill. The color of the face in the lighter cases was not changed, but, in the severer, was always pale. With adults, the face collapsed to a hippocratic look after several days, or assumed an apathetic, rigid, drowsy appearance. The palate was white in all cases. The skin was never continuously burning hot, neither was it ever cool and moist, as in pneumonia curable by Copper. A full hard pulse was never observed; the stool was consistent and brown in pure pneumonia. At first, expectoration was entirely lacking; during the exudation it became, in slight cases, tough, and of the color of mucus; in severer cases, rust, or chocolate-colored, intermixed with streaks of blood."

All *these were Iron symptoms*, which, simply and solely, distinguish this form of pneumonia from the following and other forms.

§. 188.

The pneumonia curable by Copper, §. 185, was distinguished by the following symptoms, which presented themselves in the proving of Copper on the healthy :

"Many had, before the febrile affection began, cough without expectoration for several days, or diarrhœa, and the latter, indeed, not only during the prevalence of hepatic complications, but also in pure pneumonia. The patients complained either of stitches in one side, or of pressure, or of nothing at all. The stitches did not correspond in any respect to the pulmonary affection, for, sometimes the latter was observed in the very first days, while the former were absent, or, *vice versa*, the stitches were present while auscultation announced nothing abnormal. Sometimes, in the first days, the suffering seemed to the patients so slight and void of danger, that they sought no relief till, quite suddenly, this danger of suffocation set in and compelled them speedily to seek aid. With adults who presented, to the ear, the symptoms of Bronchitis, or of Pneumonia combined with the former, there was sometimes no complaint of stitches or pressure; but only the general complaint of the general fever symptoms, as lassitude and headache. The former was always considerable; the latter, except a few times under hepatic complications curable by Chelidonium, was slight, and confined to the forehead only. The color of the face was mostly palish-gray, dirty light-blue, seldom reddish, and only a few times, in evening exacerbations, was it bright red and hot.

The palate was always red; it was never found so white as in the pneumonia curable by Iron. The sweats were moderate, sometimes clammy and often smelt very sour. If one should pronounce these sweats critical, the statement would lack every evidence of truth, for, with its appearance, the patients did *not* improve at all; they not only felt worse, but really were so, as the objective symptoms demonstrated. In most cases there was a tendency to diarrhœa, or there was more or less of diarrhœa actually present. The duration of the disease, left to itself, was about three weeks; cases continuing thus long still presented themselves for treatment, because, up to that time, they had not recovered spontaneously. The remedy, however, could sensibly shorten this period (but always without the appearance of any crisis) according to the severity of the case, or the time in which the remedy was used. The treatment never lasted longer than nine days in ninety-three cases, and these all ended in recovery with the exception of four."

Those versed in the Homœopathic Materia Medica, will thus clearly see that, in these forms of pneumonia cured by Iron and Copper, though (according to another rule) nothing less than an involuntary Homœopathic practice occurred; or rather, even by means of this other rule, *i. e.*, cures have occurred, according to Homœopathic laws, though the physicians treating the cases did not know it.

§. 189.

I have taken notice of this fact, in passing, merely to leave it to the reader himself to reflect upon its modality, before I introduce the laws which have bearing thereon. It must surprise him, at least, that, even with opponents of Homœopathy, cures take place after the Homœopathic principles; with opponents, who, at all events, do not intend in the least to treat their patients according to these despised principles; and yet, the fact holds good, that pneumonia, curable by Copper, is associated with, and characterized by, symptoms which *Copper*, taken internally, is wont to produce; that, consequently, the forms of pneumonia, curable by Copper, *correspond with the forms* of the reciprocal action of Copper with the healthy human organism, upon which it has been proved; furthermore, that the same *holds good in an entirely similar manner* with the forms of pneumonia, which, according to the principles of Rademacher's school, are curable by *Iron*.

Just so does pneumonia, curable by Saltpetre and bleeding, *agree exactly in its characteristic symptoms, as well as in its form*, with those which *Saltpetre* is wont to produce, when proved upon the

healthy, and it thus differs decidedly from those curable by Iron and Copper. For proof of this, I adduce the *symptoms of Saltpetre* from § 183, “distressing sensation of a weight upon the chest, as if an anvil pressed the thorax together. Those who suffered the most, could take medicines and drinks only in short, interrupted swallows, since they could scarcely do without air till the fluids had passed over the epiglottis; where the pneumonia had attained the highest point of severity, suffocation seemed imminent; the expectoration was, at first, like saliva, as in catarrhal cough; but when the disease tended towards amelioration, it became yellowish, lumpy, purulent. With many, the expectoration was tinged with blood; frequently it was nothing but blood, and indeed, in many cases, the disease took on the form of hæmoptysis, connected with all the pathognomonic symptoms of peripneumonia. With three patients, who, from the severity of the disease, came near suffocation, I finally observed, after favorable crises had already set in, an extremely painful excoriation and inflammation of the throat.

With some, the disease began with diarrhœa. With most, the taste in the mouth was unaffected, like that in health, or mucous. Some complained of an extremely annoying bitter taste, attended with nausea and inclination to vomit, though the disease was not of a bilious nature. The urine was, with some, at first, straw yellow, like that in health, but with most it was deep red and fiery, without sediment. If the disease, however, was at its crisis, it threw down a precipitate, which, at one time, seemed like brick dust, and at another, purulent. The crisis consisted, chiefly, in general warm sweats, which, appearing at intervals, often continued for many days. With many the eyes were slightly inflamed, swollen, and shining, etc.”

That these symptoms had, as a necessary consequence, many others which are also characteristic of this specific form of pneumonia, as the insufferable, constant, burning heat, the anxiety and restlessness, the so-called abdominal respiration, the hot, bright red, puffed, swollen face, etc., is self-evident to every pathologist.

§. 190.

If, now, the adherent of Rademacher did not succeed in characterizing these three forms of pneumonia, specifically differing from each other, except by the curative influence of Nitrum given in one form, of Iron in another, and of Copper in the third, he could not do it from the simple reason, that he had not learned the specific forms of the recip-

rocal action of the organism with these three drugs as they appeared in the homœopathic provings on the healthy. Accordingly, though against the will of this school, the proving of drugs upon the healthy is, for this very school even, a necessary postulate, if it does not wish to grope about forever in the twilight of *primitive experiments*, §. 90; for, as I think I have sufficiently set forth, it is only spared this procedure on condition of knowledge gained by means of drug provings on the healthy, because, thereby, the ever-unerring diagnosis is presented to it *a priori* by means of synthetic comparison, §. 73, and because immediately, in accordance herewith, it can establish the right indication for the use of the necessary remedy, and not alone after making experiments upon the sick, which besides is repulsive to every physician.

But, aside from this, these examples of the specific forms of pneumonia, have incontrovertibly justified the demand of this school, that, in the diagnosis of diseases, one should not allow himself to be guided merely by their anatomical seat, by the pathological interpretation of the curative object, or even by the possible chemical and physical investigations thereof, and least of all by pathological types, but chiefly by those symptoms which, *outside* of all these methods of inquiry, and, side by side with them, *chiefly indicate the specific difference of the form under consideration from other forms*.

Just in these very contingent phenomena, which the frivolous diagnosis of physiological medicine entirely neglects, because it cannot comprehend, and does not know what they might signify, nor how they might be used, are contained the main phenomena for therapeutic purposes; they comprise, not only the conditions of time and place, but also those of the other accompanying *circumstances*, and these latter, according to the doctrines of Homœopathy, are the surest guide to therapeutic indication.

§. 191.

We know now that Rademacher's school recognizes three forms of pneumonia which succeed each other at certain times, thus mutually *exclude* each other; that these forms can be empirically diagnosticated, and in such a manner that the remedy indicated for them may be found; that each of them is accompanied by symptoms which *agree in form* with those which drug-provings with Copper or Iron or Saltpetre have presented. Hence, the fact is established that these three forms of pneumonia must have been produced by causes whose effects are *similar* in form to those of these three drugs, *i. e.*, corresponding with them. I cannot believe that any one who has read the previous

paragraphs, can entertain any doubt as regards this assertion. It is just as clear, however, that a conclusion from like effects to like causes would be false, and hence the question is yet to be answered, with what laws of nature this remarkable fact, as many consider it, could be brought into connection. On the contrary, it cannot be denied that, from these facts, it can be but the merest step to the laws of Homœopathy; it ought to be kept in sight, however, as with all such questions, that we should *not* become obscured by settled habits of thought, *or*, as it sometimes clearly happens and, not much less frequently, should *not* be misled by considerations foreign to the subject; *or*, which is still worse, but happens much oftener, than the surface of life is able to reflect it, that we should *not* strive to oppress and persecute as long as possible, all new results of inquiry, for fear of the example which Pythagoras set, when he offered several hecatombs of oxen on account of having discovered his theorem.

. §. 192.

Here now, I must not neglect to call attention to the understanding of the symptomatic groups of pneumonia peculiar to this school, and to a comparison thereof with that description of pneumonia offered by the physiological school, which latter hardly any one will understand, and least of all he who should learn something therefrom, and moreover to the fact that the physiological school, even to-day, bleeds and gives Saltpetre in pneumonia, as it seemed to be indicated by the above cited conditions about the year 1795, and at the beginning of the present century. Many of the older practicing physicians will still remember such forms which are to be compared with the present forms in nothing, the local affection excepted. The intensity of this disease, as I myself remember from a few cases, has decreased so very much, that one observes it now but very seldom.

Thus everything has not only its *place*, but its *time*, and its *circumstances*, and, to consider these, is the first duty of the practicing physician, without regard to any hypothesis of any patented Therapeia, come whence it may.

§. 193.

How the indications of this school of Rademacher can be rendered valuable in other respects, I can most briefly illustrate by an example from my own practice.

To the views taught us by the schools, and which cling very closely to many, it is surely no trifle to sacrifice, utterly, and at once, the independence of pathological forms, recognized by that school, and, in the sense of Rademacher, to forget it; without regard to the forms, without regard to their stages, to their intensity, and even without any regard to any localization of the morbid cause; in brief, to be guided simply and solely by the *Indicatio ex juvantibus et nocentibus*, in order to be able to choose, empirically, in any given disease another and unusual remedy. But, from practice, everything becomes clearer than from theory.

Several years ago, within the large circle of my practice, a violent epidemic of measles broke out, by which adults even were not unfrequently affected.

At the very beginning of the stage of incubation, during a violent outbreak of fever, the exanthem appeared as early as on the very first day, and at the latest on the third, under defervescence of the fever when Aconite was given. There appeared sometimes an additional eruption of the exanthem, even a second and a third, and that, as a rule, was the end of it. In cases of retrocession of the exanthem, with accession of inflammation of the lungs or brain, (which never happened to me under the use of Aconite, but which were transferred to me after they had been treated by others,) with all their fatal symptoms, the eruption, by means of the use of Aconite, within two or three hours, had reappeared again upon the skin in a most luxuriant extent, during a profuse perspiration, and the children were saved. I must remark here, that this remedy, of the most injurious influence in the allopathic doses of the physiological school, I used in homœopathic doses only.

In badly treated cases, however, or as it happens most frequently with the poor, in neglected cases, the most annoying sequelæ set in almost regularly; chronic bronchitis, swelling of the parotids, peculiar hypertrophy of the mucous membranes of the nasal cavities, amounting to entire occlusion; exudations in the fundus oculi (Basedow's disease); inflammations and swellings of the joints of the elbow, hand, knee and ankle, sometimes of all these joints at the same time; dropsy in consequence of desquamative chronic nephritis, etc. Every therapeutic attempt, in large doses or small, according to the most exact Allopathic and Homœopathic indications, for each one of these separate forms of sequelæ, was in vain. The same thing happened to my colleagues of the physiological banner, and thus I could have comforted myself. Finally, since nothing was to be lost and everything to be tried, I gave, to one part of my patients, Iron, to another part

Copper, to the third Natrum nitricum. The result was, without exception, an aggravation of all the cases the next day. What now? To the interested public, this lack of success, truly enough, did not appear strange, for many of my colleagues' measles patients died, even during the simple development of the measles, which, at least, did not happen to me, while they lost still more in consequence of the retrocession of the eruption, and this again did not happen under my treatment. But, most of those suffering from the sequelæ, my colleagues lost very suddenly. Nevertheless, I held it to be my duty not to give up hope of finding some means of deliverance. He who was never in such a situation, or can be indolent enough to quiet himself with the subjective conviction, that art and science knew no further help, and, that for death no herb had ever grown, surely will not understand how many sleepless nights must be given to such studies, and when I communicate what follows, it will be read much easier than it was learned; with many it will read so easily that they will think that it is nothing new, after all, and is quite simple. *But it is just the simple which eludes unpracticed observation far more than the complicated, and it is an incontrovertible criterion of the practiced art of observation, to find the simplest remedy for the most complicated diseases.* To be sure, in this case, it was nothing new, generally speaking, but none of my colleagues had an inkling of it, and, at any rate, it is not taught up to this day by any Professor in the seats of the sciences, as is the case with many things which I here present, and which will ever be found indisputably correct in theory as well as practice.

§. 194.

Dr. Latz and no one else in all the range of medical literature, of all systems and methods, gave me at least a clue. He discovered, though I could not subscribe to all he affirms, this at any rate, that at various times, various disease-forms are not curable simply by Copper, Iron and Saltpetre, nor even by the organ-remedies alone, but by those remedies only which corresponded in general to a disease-form which shortly before had appeared epidemically.

If that be true, then must Aconite alone cure the sequelæ, as it did the measles itself. I now gave Aconite, without exception, to all those children afflicted with the most varied forms of those sequelæ, and the next day, even the relatives observed a very striking improvement of all the varied troubles. It will hardly be necessary to enumerate the separate cases again, and state the result that followed; it is

enough to mention, in general, that, under the influence of the Aconite, all were cured within eight, or, at the most, fourteen days, according to the extension and severity of these sequelæ. In one case, however, where there was already mortification of the mucous membrane of the nasal cavities, and hence, a specific process of decomposition; Aconite naturally enough did not check this, but Arsenic did, so that the scabs fell from the sores in six days, and this child also was cured.

I must add the observation, however, that, from this single remedy, viz., Aconite, given in minute doses to the dropsical, perspiration and copious diuresis set in, and the albumen had disappeared from the urine in a few days; that in inflammation of the joints, the raging pains remitted after a few hours and a very rapid absorption ensued; in like manner the swelling of the parotids and the goggle-eyes diminished. In three cases, the like occurred under re-appearance of the complete measles exanthem and the chronic catarrhs were cured under the occurrence of copious expectoration. My colleagues continued to give their antiphlogistics, diuretics, sudorifics, expectorants, absorbents and a number of other remedies, but without attaining such favorable results as mine.

§. 195.

This example has made us acquainted with Aconite as an organ-remedy, in Rademacher's sense, and, at the same time, and to a considerable extent, with its value as a specific, *i. e.*, with the law of its specification, with its forms in its reciprocal action with the organism; here with its effect upon the brain and the organs of the chest; its effects upon the serous and fibrous tissues; upon the skin; upon the eyes, œsophagus and fauces, as well as upon the kidneys, and the quality of the urinary secretion, and by means of all this, with its so-called anti-febrile action. Thereby the far-reaching significance of a remedy, if it is to be used as a *specific*, §. 84, becomes clear and manifest, as well as the necessity of the study of *drug-provings* and the extent of knowledge thereof which the physician must possess to be capable, not only of explaining the effect of the medicine which he gives, but also of *determining beforehand, by way of deduction*, its curative result.

Moreover, since, here again, one example may answer for all, the uselessness of those remedies is hereby fully established, which, in the Therapy of the physiological school, are said to act as anti-phlogistics, diuretics, sudorifics, expectorants, absorbents, etc., since a *specific*, where it is indicated, accomplishes all this *together*, hence cures

essentially, partly by virtue of its sphere of action upon the organs and systems of organs in specific relation therewith, partly by virtue of its material contrast to the specific morbid cause, which has attacked the organism according to its degree and extension.

If, from the foregoing, the *idea of a specific* has not been sufficiently developed to be generally understood, this example, in connection with the previous definitions of the subject, will scarcely leave any question unanswered. A correct indication is, hence, always an *essential* one, *i. e.*, it must always proceed from the entire group of all the symptoms of the disease which, in each case, announce the specific form of the disease, and no one of them is to be rated lower than another. Next, it must choose that remedy, of which it knows, by experiment and observation, that the specific form of its reciprocal action with the organism, *reaches just as far and possesses just as comprehensive a relation to the organs and systems affected by the disease as the unknown morbid cause and its inaccessible material qualities themselves.*

We thus observe in Therapeutics two kinds of specific processes. At one time, those introduced by the causes and conditions of the disease, which we called specific disease-forms, though we lack the knowledge of their external conditions for the most part, consequently, their designation; then the specific forms of reciprocal action with the organism and its parts, known from drug-provings on the healthy under the influence of which [reciprocal action] the disease is cured, by which, hence, *disease-forms* and *drug-forms* are presented; a designation which I must retain for the sake of brevity, since I have sufficiently explained what I wish to have understood thereby.

§. 196.

From the foregoing quotation of the three forms of pneumonia it will have been observed that the ætiological school designates its pathological cases by the names of those substances, by means of which they were cured, because it avoids, from principle, but to its own special injury, to speak of pathological forms. By this means, however, the characters of the total specification of a remedy are forcibly separated and never rightly perceived; *thus there would always be offered nothing* but the designation of a relation between the single effect of a remedy and a single case of disease; for, such a relation would never show the entire kind of a specific sphere of drug-action, and would give only a contingent relation, from which nothing more could be inferred, and from which, in the main, nothing more

could be learned than from relaxants, emetics, diuretics, antiphlogistics, etc.

§. 197.

Homœopaths will surely reproach me, by saying that I had no need of those ætiological indications, for all these cases and their sequelæ come under the range of Aconite, according to the principle *similia similibus*. This I do and must acknowledge, but, how many hundreds of cases come under the same range, according to this principle, without its ever occurring to a Homœopath to give Aconite, because often, the concomitant circumstances of a disease *are not clearly enough marked*. I will not reply thereto, that it is easier to pass judgment after a thing is done, and easier to find fault than to do better; these cures would also have been by no means possible, if, according to this principle, Aconite had not been at all indicated. This proves nothing indeed against Homœopathy, but it must nevertheless be confessed that, not infrequently, in spite of its principle, Homœopathy wavers in its choice of a remedy, because none of its remedies are as yet thoroughly enough proved, and because it would rejoice much over an additional support, which is furnished by just these very ætiological indications for many cases, and which is and will be of inestimable value; a support which, however, is advanced to the dignity of a law as soon as we succeed in bringing it into dependent connection with the laws of nature.

Hence, I return again to practice, and the reproaches of Homœopathists require that I proceed further. This epidemic of measles was followed closely by an epidemic of scarlatina. For many years I have known the specific effect of Belladonna in this disease. It always not only surely checked the specific inflammation of the cutaneous surface, under defervescence of the fever, and introduced the stage of desquamation, without any serious accident, but it also warded off all evil consequences and sequelæ of the scarlatinal process. But, in this epidemic of scarlatina, I recognized at once, in the very first days, a favorable effect of Belladonna, it is true, yet one that was much less favorable than usual. I suspected at once a transition of measles to scarlatina, according to Latz (*die specifische Heilmethode, bei Bädeler in Essen, 1853*.) and gave without any further indication, and, strictly speaking, without any Homœopathic indication at all, Aconite in hourly alternation with Belladonna. The result again exceeded all expectation. One would be mistaken who took this for an *ex post* conclusion; it was a complete deductive conclusion, in which the major proposition was present as well known, and as such formed the indication.

Since that time I have followed the observations of this truly ætiological school with the greatest attention, and, as a therapist, am under the greatest obligations to it. It has delivered me very often from many a helpless situation, and, according to what I have experienced and tested, will still continue to do so in the future.

§. 198.

Before I take leave of the Homœopathic complements for the therapeutics of this school, I must first make mention of the natural laws which control the effects of their so-called blood remedies — Copper, Iron, and Saltpetre.

Science has already demonstrated that Copper, in a finely divided state, absorbs immense quantities of ozone. It is also demonstrated that the ozone in the atmosphere is not found in the usual quantity in places, for example, which are affected by cholera, or, in which the atmospheric electricity is negative. Now, Copper is one of the chief prophylactics against cholera, as we learn from workers in copper, who remain free from cholera. Copper cures this disease in its first appearance, and in every case, so long as the consequences of the first stage have not set in, which naturally can no longer yield to the influence of Copper.

If we take up the experiments of Dr. Horn, of Munich, with the electrical machine, this condition of things can be demonstrated by the art of experiment. Let an electrical machine, with a glass plate of at least three feet in diameter, be put in rapid motion; apply one end of a copper wire to the conductor, and put the other end into a glass of water, then the water will be charged with ozone. But if we attach a copper wire to the rubber of an electrical machine, and put the other end in a glass of water also, then it will, as the chemical reaction demonstrates, especially at a time of prevailing negative electricity in the air, be impregnated with a compound of cyanogen, which is always of a peculiar odor, different from that of ozone, and which Horn calls iodosmone. Moreover if one smells too often of this water, or drinks but even a small quantity thereof, he will experience in himself all the phenomena which precede cholera, followed by violent cholérine. The surest remedy to arrest, almost in a moment, this artificially produced state, is water impregnated with ozone. I convinced myself personally of the truth of this discovery. If we add to this the property of Copper in a finely divided state, of absorbing great quantities of oxygen, then the operation of Copper is explained according to a natural law; it operates inwardly, administered in a finely divided state as a function-

remedy, as an ozone-bearer, since, circulating with the blood, it takes up more ozone from the inspired air than does the blood, and imparts it to the blood. Accordingly, all disease-forms, in which Copper is the remedy, are to be referred to a lack of ozone, or an overplus of iodosmone in the blood, and these disease-forms naturally constitute as comprehensive a group as the atmosphere forms a comprehensive condition of life.

Since we know from Rademacher's school, that the pathological forms which are cured by Copper, are diametrically opposed to those which are curable by Iron and Saltpetre, Iron and Saltpetre must stand in opposite, yet not less comprehensive, relations to the influence of the atmosphere than Copper.

With chloride of Iron, the spirituous extract from the muscles of animals killed with iodosmone, gives a bluish green re-action, thus resembling Cyanogen, which, with the extract from their intestines, gives a dirty red re-action, as does the cyanide of Sulphur. Hence, the conclusion is all the more admissible, that it is Iron which will operate curatively, in those diseases which arise from lack of iodosmone, and a surplus of ozone in the blood, since ozone increases the arteriality of the blood, and iodosmone its venosity: Horn's iodosmone seems related to Schönbein's antozone. §. 100.

The earlier view, that the color of Hæmatine springs from its containing Iron, has been given up, because this coloring matter can be produced free from Iron. The Iron, however, is contained in the blood in other fluids and tissues of the organism, and, in many diseases, unfolds, as a remedy, a specific yet a two-fold action. It can either stand as a function-remedy, in a well defined relation to the atmospheric constituents which are found in the organism, or, as a nutrition-remedy, supply the loss. In the first case, especially, as a sub-oxide, it is an ozone-bearer, a powerful means of reduction and, as such, is brought into use by Rademacher's school.

The physiological chemists, however, think that, in the experiments of Schönbein, nothing more is to be seen than a possibility; but they know nothing of the most *sensitive* re-agent; *they have made no experiments upon the human organism*, least of all in its diseased state, and their skepticism has, therefore, no weight with physicians.

§. 199.

Now would come, in turn, the experiment with Saltpetre, as regards its relations to the Hydrogen of the organism; especially the cubic Saltpetre, which, as is well known, is very hygroscopic. We know,

also, that the neutral (and middle) salts, *Glauber's Salts*, *Kali nitricum*, protect the blood corpuscles from the influence of water. If I may further mention here an induction made from various experiments, then the bleeding in pneumonia curable by Saltpetre, did not act as such, but rather as abstractions of hydrogen. This subject will, however, be more completely discussed at some future time. With us practicing physicians, the apparatus for such physico-chemical investigations is seldom at hand, and, still less, the time to institute them. If at least a few physiologists, of whom we can count about five hundred in Europe, could only resolve at last, not to trouble themselves with dabbling in therapeutics, where they can accomplish nothing, they would find it a far more remunerative occupation to aid therapeutics in solving problems, the solution of which is not attended with difficulties. If this swarm of busy bees would divide itself into groups, for common labor, to collect the honey of truth with united powers, according to the rules of experiment and observation, instead of deceiving themselves, from motives very often remote from science, by distributing their strength upon isolated facts of curiosity, this would advance us about half a century.

In regard to the effect of Iron just mentioned, and especially of *Glauber's Salts*, I quote a passage from Liebig's *Chemical Letters*, Vol. II. p. 27, in order to silence skepticism at once. There we read:

"While 1000 parts of Water shaken with air, and perfectly saturated therewith, absorb only $9\frac{1}{4}$ volumes of oxygen and $18\frac{1}{2}$ volumes of nitrogen, 1000 volumes of blood, in from 100 to 150 volumes of hydrogen, take up only from 17 to 33 volumes of nitrogen. Hence, it is obvious that the oxygen absorbed by the blood can only be partially contained in the fluid: *for the fluid in the blood is water*, of which we know, that it absorbs, under the same circumstances, from 11 to 14 times less of oxygen; we must, on the contrary, assume that the *great absorbing power of blood depends upon certain of its constituents which possess more affinity for oxygen than water*. The degree of attraction, by which the oxygen is held in the combination which it enters into in the blood, is very small, but this is no ground for believing that oxygen is not chemically united with the blood. We can increase the power which water has of absorbing many gases when we add to it substances which possess a chemical affinity for the gas, be it ever so feeble; if we add to water the phosphate of soda, for instance, its power of absorbing carbonic acid gas increases; with one per cent. of this salt, this fluid takes up twice as much carbonic acid gas as pure water would have taken up, under ordinary pressure

of the atmosphere. *A solution of Sulphate of Iron in water takes up forty times more Nitrogen than pure water."*

"The gases absorbed, leave both of these fluids in a vacuum, and, indeed, they may be driven out of them, from the first, by merely shaking with atmospheric air, and from the second, by shaking with carbonic acid gas. No one, however, thinks of looking upon this action, which is so like that of the blood, as a proof that the carbonic acid in the solution of phosphate of soda, or the nitrogen in the solution of the sulphate of Iron is only absorbed, and is not held in a chemical combination, because it is known that the *dissolving power of water, in these cases, is dependent upon the quantity of salts dissolved*. But if the quantity of the absorbed gas increases in a fixed proportion with the quantity of salt in the solution, *then it is a settled fact, that the absorption of the same depends upon the salt, and not upon the water*.

§. 200.

Every living organism moves in oscillatory rhythm within various spaces of time, from one position of equipoise into another. We see this in the rhythm of the motions of our solar system even, and in its influence exerted, through the movements of the moon and the earth, upon ourselves. But no oscillatory rhythm of life remains the same; it never returns again to the point which it last reached, and, to compare this process with the pendulum, one may say that the terminating angle of all living organisms, from the time of maturity, becomes smaller and smaller. What immense results are produced by apparently very minute causes of this kind? For example, the precession of the equinoxes can be calculated with mathematical accuracy, as a variation of but 11.8 seconds per annum, and yet it is possible, in consequence thereof, to determine beforehand the changing climatic condition of ages. This single momentum, to many apparently insignificant, must, in connection with the other motions of the earth, upon its surface, and in its interior, draw after it a continuous succession of changes of things existing.

The earth itself, however, undergoes the mightiest changes from other apparently insignificant causes. Every hour, for instance, it parts with immense quantities of heat, through hot springs and volcanoes, which are never restored to it again.

If, moreover, to these external causes of the change of our own organism necessarily arising therefrom, we add its inner causes in consequence of the incessantly increasing efforts for a higher state of

culture which has increased, in our day even, the usual demands upon mind and body very rapidly and to the utmost, and which will still increase them from day to day, then the merit of Rademacher, in having first of all, though only by a higher kind of instinct, yet earnestly, called the attention to the ætiological momenta, and in having made practical use thereof at the bed-side, is unquestionably great and generally to be acknowledged; and it is a very great merit, indeed, in comparison with physiological medicine, all the labors and endeavors of which appear as if both man and earth were remaining the same forever.

Wunderlich, in the preface to his *Special Pathology and Therapeia*, demands of physicians autopsy, and, above all, *historical* knowledge.

In the ponderous volumes of his work, however, no syllable of a historic knowledge of Pathology and Therapeia is ever mentioned, while the whole Pathology and Therapeia of Rademacher, and his adherents, rest upon *historic* knowledge of the formerly existing and still occurring so-called epidemic relations of disease.

I must also protest against the view, quite too self-laudatory, which is contained in the preface to Virchow's *Manual of Special Pathology and Therapeutics*, which speaks as if it had gathered all the splendor of German investigation into one single focus. We find nothing there of the entire Therapeutics of Rademacher and his adherents, a fact which, in view of what has been said, might characterize that assertion with a more precise designation than that of the most overweening self-commendation.

For instance, diseases often arise which are not at all referred to in the history of medicine, or have been referred to very briefly, and, in such cases, the views of Professors are quite discordant, because they lack any *analogon* whatever of an enlightened comparison. In Homœopathy, no difficulties lie in the way of establishing a proper indication for diseases not yet known, or not having yet occurred, or for such diseases as, in physiological matters, are still the subject of many a doubt.

In these circles they call, for example, that which is supposed to be understood as Pyæmia, hectic vulnerable fever at one time, at another, purulent inflammation of the veins, at another, pseudo-erysipelas, etc., and they direct their treatment according to such designations. But, in time of war, the troops were decimated under the medical treatment which accommodated itself to such terms. Even in the last war, the greatest attempts were made to gain the mastery over the frightful devastations of pyæmia; among other things, the effect of Arnica even, known to Homœopathy, was brought into requisition. But how? Truly without knowledge of, or regard to Homœopathic precau-

tions, hence with bad results, and that was sufficient for the adherents of the physiological school to reject again the use of Arnica.

By the side of this I must hence place an example from Homœopathic practice, assuming that the reader is familiar with the disputed questions relative to pyæmia, so that I need not recapitulate them, in all their baselessness.

§. 201.

The diagnosis in pyæmia is unattended with any difficulties. But whether pyæmia arises from the puerperal state, from wounds or other causes, under all circumstances it must be preceded by a production of pus, as the only possible condition of its development. Hence it will be most appropriate in all these cases, *utterly to prevent the formation of pus*. But the physiological school maintains that, without pus, the formation of a cicatrix in wounded parts, is impossible. So long, however, as it maintains this view, which, as we shall see, is unjustifiable, so long it will not succeed in preventing the invasion of pyæmia; on the contrary, it will at all times be overtaken by pyæmic disease-forms.

Homœopathic drug provings, in the meantime, teach us another view. From them we know that Arnica and Arsenic chiefly, very decidedly delay, or utterly prevent the formation of pus, or even prevent its development, and that for this very reason, cicatrization and cure *are especially hastened*.

Even in smaller injuries, in cuts of small extent, this effect of Arnica may be perceived without the aid of any magnifying glass. One sees clearly how the serum of the wound becomes thickened, how the edges of the wound approach each other, and finally agglutinate, *and that without the formation of pus*. This can only happen by the withdrawal of a certain quantity of water from the serum. This phenomenon and the observation of an increase of the watery contents of the urine after the internal use of Arnica, without increased drinking, and, indeed, without any other quantitative or qualitative change of the other constituents of the urine, lead to the conclusion that the fundamental action of Arnica consists in the withdrawal of water from the organic tissues in general.

Great injuries, which, as a rule, are followed by enormously profuse suppurations, for instance, complicated fractures, and carbuncles, give the best opportunity for counter-proofs. But, as long as Arnica is taken (from the 1st to the 3rd), so long the suppuration is delayed, and finally becomes null, while the cure goes on very rapidly and without

pain. But, if we neglect the internal use for 24 hours, and, in case of fractures, the external even (in which cases compresses should be used wet with a mixture in the proportion of a teaspoonful of Arnica to a quart of water), we shall find considerable quantities of pus formed and collected again in the wounds.

Hence, where it is possible, I always give a few doses of Arnica a day or two before and after every bloody operation, whether occurring in the domain of surgery, ophthalmology, or obstetrics, or before and after every delivery, even where it is quite normal, and since I have pursued this course I have never met with a case of child-bed fever.

The case is different when we have to treat pyæmia already fully developed, or cases which lead one to look for the appearance of pyæmia at an earlier or later date; for instance, fistulous abscesses of years' standing, discharging watery pus, surrounded by a broad bluish border, or burrowing abscesses, etc. In such cases, a single dose of Thuja 30 often suffices, or Natr. sulph. 3rd, etc., gives everything a favorable turn; the abscesses collapse, the fistulous canals dry up. Extensive phlegmonous abscesses, of course, should be freely opened. Yet a case in which it was necessary to use Arsenic, made me doubt, somewhat the absolute necessity of opening such abscesses.

I was called, as second physician, to a man suffering from pyæmia. In consequence of taking cold, as I was told, the patient had experienced acute pains in the right thigh, for which he was subjected to a so-called anti-rheumatic treatment, by a follower of the physiological school, with Opium, Colchicum, and frictions of Ol. Hyoscyam. The pain, however, increased every day, the thigh swelled, the superficial lymphatics became inflamed till the 7th day, when, suddenly, a violent chill set in; cataplasms were used externally and Nitre internally. On the 8th day, as I was told, the whole extremity had become erysipelatously inflamed, pulse at 100; sleeplessness, and delirium at night ensued, with unquenchable thirst and loss of appetite. The next day, vomiting occurred; tongue, lips, and nostrils, became dry; difficulty of breathing and auscultation indicated a lobular pneumonia; instep œdematous, leg and thigh very much swollen, the skin of those parts quite erysipelatous: violent pains in the region of the groins, thrombosis of the great veins of that region.

The man was 32 years of age; had never been sick before, except having had Gonorrhœa several times in his earlier days, the discharge of which had always been checked by injections.

I promised my assistance on the condition that nothing further should be done, and that only Arsenicum 10th should be given, five drops every two hours, which was agreed to. On the 10th day remis-

sion of all the symptoms, without exception, a state of things very remarkable in the eyes of my colleague. On the 11th, the swelling on the thigh began to sink in, the pains concentrated themselves again more upon the middle of the thigh; patient breathed more freely. On the 14th day the swelling was so far diminished that, in the middle of the thigh, on its outer aspect, a very evident fluctuation was apparent, deeply seated. Now, an incision was to be made. However I succeeded in preventing it, and in view of the general improvement, persuaded my colleague to give but four doses of Arsenic a day. On the 16th day the general condition was extremely satisfactory. The pulse was still 100, but the tongue was moist; there was no thirst; respiration was free and uninterruptedly audible again over the whole chest; delirium had already ceased for three days, and quiet sleep at night had taken its place; the redness of the thigh had disappeared for two days; the pain was endurable, at least did not disturb the sleep any more; in short, all the functions began to fall into their accustomed courses; the diseased lower extremity, however, was still immovable; the patient during this time had fallen away very much, and his debilitated condition was not free from danger. All about the patient urged the opening of the abscess, and his great weakness led me to yield, and to make an incision about four inches deep. To the extreme and unconcealed astonishment of my colleague, who prophesied an enormous discharge of stinking ichor, the most beautiful pus *bonum et laudabile* flowed therefrom. This last circumstance led to the question whether the cure would not have gone on and been completed without the incision. The use of Arsenic was now naturally discontinued; in fact, nothing was given internally; the dressing was renewed twice a day; the pus remained benign, became gradually less, and the patient improved manifestly every day under appropriate diet, but was not able to leave his bed till fourteen days afterward. The leg still remained stiff, but this stiffness disappeared by the use of methodic movements, with spontaneous closing of the incision after ten days more. I allowed the patient to resume his official duties after another two weeks had passed without accident, and that was the end of the matter.

§. 202.

It was in the year 1842 that the French school of physiological medicine was transplanted into Germany and its doctrines were promulgated here as the only saving doctrines. Its programme, among other things, loudly advocated skepticism, in the following manner:

"There is no doubt that, in a given time, at the same place, a large number of men sicken in the same way. But what must common sense think, if, from a somewhat *wet* spring, from a hot summer or from a few autumnal fogs, the severest diseases are said to arise? How can one listen to it when, with the utmost confidence of faith, the most varied forms of disease, as they happen to prevail, are ascribed to these *simple* circumstances. Croupous diseases, skin diseases, catarrhal affections, dysenteries, typhus diseases, pneumonias, articular rheumatisms, pains in the limbs, all these affections, if they prevail epidemically, are said to be occasioned almost always, and in all instances, by the state of the weather just then prevailing, no matter whether it be warm or cold, dry or wet. If it were hot, when a dysentery prevailed, then it was the heat of the day; if cool, then it was the coldness of the night that was to blame. If the winter is dry, then it has inflamed the lungs with its keen air; if it is wet, then the damp, cool atmosphere must have produced the pneumonia. Thus we help ourselves, as best we may, by laying upon the weather what we cannot otherwise explain. Besides, daily experience shows that many hot summers and many cold and damp winters occur without bringing such diseases in their train, and, that whole towns and districts and many individuals are spared, though they are exposed to the same weather."

Rademacher's school, whose empiricism I have brought under some explaining laws of nature, presents the scientific, essential and perceptive reasons thereof, and supplies also the necessary remedies.

The skepticism of this programme is, as is all skepticism in every science, the sure sign of decay, and the author expresses himself thus upon this point: "The skepticism of modern times began long ago to rear itself against the old principles of Therapeia, and it needs only to shake the structure and all threatens to fall down in a heap. Hence so many fear to touch it; hence they dare not even confess how hollow and rotten everything is."

Whither this skepticism has led the majority of German physicians, I can make clear from a "Clinic of diseases of the liver" of the year 1858, where we are told: "As with the Alchymists, it was the idea of the philosopher's stone, so was it in Therapeutics, the idea of curing, which thrust into the back-ground the impartial natural combination of data and led it astray."

To this, then, the skepticism of our day has brought us, after more than two thousand years of the greatest industry, of the greatest thinkers, and practitioners, that it treats the idea of Therapeutics, the possibility of a cure of diseases, as a myth. But why do these gen-

tlemen, none the less, order the most complicated prescriptions every day. in utter opposition to this expressed conviction? Where is their boasted humanity?

Skepticism is empiricism, carried to extremes, and dogmatism is rationalism, carried to extremes, and between these two stools of error sits the physiological school of the present day. The despairing consciousness of this skepticism goes so far, that these physicians do not trust each other for a correct diagnosis, much less do they trust other physicians who do not swear unconditionally by their standards; not even as regards the diagnosis of a disease, which every layman can form with certainty, having once seen the disease, as it has happened with cholera, for example; and yet all these physicians were graduates of the physiological school.

§. 203.

Still another peculiarity of Rademacher's school is worthy of notice. It applies its remedies, for instance, not for the sake of removing one or suddenly destroying another symptom or process, but to bring about a changed form of the whole reciprocal action of the organism, and it frequently gives but one dose a day, in order to await the result of the reciprocal action produced; as Homœopathsists say, to allow the remedy to complete its action.

This allowing the remedy to complete its action is based upon my previous remarks on the repetition of the dose, upon the laws of function, nutrition and oscillation of the organism, and is, unhappily, *entirely unknown*, as yet, to the physiological school.

§. 204.

The *products of the disease* form the *point of attack* of the physiological school; these it seeks to destroy with all its means. Hence, with it, there is no occasion, in a therapeutic point of view, to enter upon the causes and conditions of the disease. If it sees a chancre, for instance, it merely touches it with Nitrate of silver and deprives itself of every possibility of judging, from the peculiarities of the sore, of the inner state of the organism, of which the sore is but the outward expression. Gonorrhœa it attacks with astringent and other injections, and when it has succeeded in making the discharge impossible, then it lives in the pernicious illusion that it has accomplished a cure, while it has gained nothing, by this treatment, but the absolute necessity of subsequent diseases.

It is true that it does not escape the necessity of inquiring into the causes and conditions of diseases; but therein its evil star shines, as it does not know what is to be done with all these results of such inquiries.

As the students are sent into the Clinics to learn morbid products, so mechanics are sent to industrial expositions that they may become acquainted with the products of other nations. But none thus sent ever learns, by looking at these *products*, anything of the manner in which they were made, which would be the very thing essential, in order to return home profited and enlightened.

Hence, they both come away with imperfect inductions, which possess no complete certainty, but at the best preponderant reasons according to the narrow circle of their own experience previously gathered. They have gained a conclusion only, without being able to take part in the decision. These are tendencies of the most common life, to which even the farmer adheres, believing as he does that he will gather corn where he has planted corn, for the opposing hindrances trouble him so little, that he rather leaves everything to fate; yet he hopes!

In no Clinic is it taught the students that diseases beget products only by factors, which are often very numerous; that with the removal of the factors, the products would cease of themselves; that, hence, they should direct their attention, at the bed-side, simply and solely to these factors, to the causes and conditions of diseases. They are now taught to destroy the disease, the resulting product, which, surely enough, is so erroneous a maxim that, for thinking men, it borders upon the incomprehensible. However, this maxim is, notwithstanding, so erroneously estimated as such by the students, that even their results at the bed-side, exceedingly unfavorable, of course, are not able to open their eyes.

§. 205.

To Dr. Kissel especially, is the credit due of having more fully developed Rademacher's doctrine, and, in spite of the merely subjective, and hence insignificant, but malevolent polemics of the critics of the physiological school, of having assiduously unfolded it for the benefit of suffering humanity. He has sought, as a matter of course, to give his practical experience a theoretical basis also.

Besides what has been already presented, we have yet, however, to discuss the conclusions as regards his perceptive reasons, in order that essential errors may not gain ground.

In his Manual of Special Pathology and Therapeia (1863, Bd. II., p. 153), we find, for example, the following experimental maxims introduced:

"The same processes and forms are, at certain times, curable only by other remedies, and an indication from contingent phenomena is *not possible in all cases*, since, sometimes, they are absent, or do not stand out prominently. From the *phenomena* and *processes*, only the *probability* is given *a priori*, that a particular affection of an organ, or of the blood, may be their primary cause; the therapeutical *experiment* only, made in accordance with the principles of natural science, can determine which organ, or blood-remedy, can cure the process in hand."

As an example of this, we read, among other things, page 517, *et seq.*, "that the hyperæmia of the liver, curable in various epidemics by Nux vomica water *alone*, may set in as acute gastro-intestinal catarrh, or as icterus, and that the same may happen in a hyperæmia of the liver, which can be cured *only* with Iron or Copper, and also in that which can be cured *only* with Chelidonium. Hyperæmia of the liver may also appear as Typhus abdominalis, and this Typhus, in one epidemic, can be cured *only* with Copper, *or* Iron, in another *only* with Chelidonium, and in still another *only* with Quassia," etc.

These reasons of curability are thus gathered from the *accidental* presence of the so-called epidemics; but why such an epidemic can beget such diseases, is, according to Kissel, not to be ascertained, and whether it exists, can only be known by experiments on the sick. What shall thus be indicated, in a given case, can be in no wise determined *a priori*, although such an *a priori* decision should be the first requisition to be made upon a Therapeia based upon natural sciences.

Kissel thus possesses for his indications only perceptive reasons — *rationes cognoscendi*; and, from the example just given, such an uncertainty is, at the same time, demonstrated from experiments with remedies upon the sick, as can by no means offer any inducement to imitation.

Suppose there be, for instance, a hyperæmia of the liver present. with abdominal typhus, then I may at once give Iron *by way of experiment*; for with Kissel another motive does not exist. If this does not help, Chelidonium; if this fails, Quassia. In this way three days at least are gone, which were necessary for the decision, according to the indication *ex juvantibus et nocentibus*. Now, I give Copper, only on the ground that the previous remedies remained without effect, and, as before, only by way of experiment. Thus

another day passes by again, the fourth, and without help again, for in the mean time the so-called epidemic may have changed, so that now Iron might be indicated, why not? Thus I never find any deliverance in my conclusions from the effect to the cause, and, in fact, there is no such deliverance from such conclusions, for the perceptive reason [*ratio cognoscendi*.] belongs only to the connexion of an *assertion*, but the essential reason [*ratio essendi*] to the connexion of *things*.

However, the essential reason may be one of two: it is either the reason of the *condition* or the *cause*. But the cause is the reason of the *change* or of the *being*. Hence, this is here unfathomable; it is only asserted. The condition, however, is the reason of its being *so and not otherwise*.

Thus, if we would have essential reasons for these relations of cause and result, then we must seek them, not only in the causes of disease, but also in the conditions of the organism, under which it is possible, that it is so and not otherwise, that it could become sick spontaneously or from drug-provings; now these reasons, as we shall presently see, when treating of *Homœopathy*, are not only always ascertainable, but they furnish the most important point of support of the indication, and the only possible one according to natural laws; for they lead from the *known* conditions to the mode of operation of a cause, thus from a known reason to the result necessary *a priori*.

Even the expression, that an organ- or blood-disease might probably be the primary cause of morbid phenomena and morbid processes, is hence unpractical; for an organ or the blood can only contain the *conditions* of morbid phenomena and processes, because the *causes* thereof only exist in the world exterior to the organism, and if organ- and blood-diseases are really different morbid phenomena and processes, it can happen only by means of a series of reciprocal actions, specifically begotten from the morbid causes.

Hence, Rademacher's school comprehends those *external causes* as epidemics, and for *this hypothesis*, and for every thing which closely belongs to it, the essential reasons are wanting which can constitute the only clues to certainty in medical practice. This hypothesis leans only upon the one *external reason* of disease, while the inner reasons have been forgotten; and although the art of observation is attended with the greatest difficulties, since it is a matter of the faculty of comprehension, yet nothing should cleave to the objects, which might deliver us over entirely to accident and probability, if it is our aim to establish *correct* indications.

THERMOMETRICAL EQUIVALENTS.

As the Centigrade Thermometer (or Thermometer of Celsius) is the one referred to in this work, the following Table is given, by which degrees of this scale, or that of Réaumur, may be translated into degrees of Fahrenheit, those best known to English readers.—
TRANS.

Cent.	Réau.	Fahr.	Cent.	Réau.	Fahr.	Cent.	Réau.	Fahr.
0° ..	00° ..	32.0°	16° ..	12.80° ..	60.8	32 ..	25.60 ..	89.6°
1 ..	.80 ..	33.8	17 ..	13.60 ..	62.6	33 ..	26.40 ..	91.4
2 ..	1.60 ..	35.6	18 ..	14.40 ..	64.4	34 ..	27.20 ..	93.2
3 ..	2.40 ..	37.4	19 ..	15.20 ..	66.2	35 ..	28.00 ..	95.0
4 ..	3.20 ..	39.2	20 ..	16.00 ..	68.0	36 ..	28.80 ..	96.8
5 ..	4.00 ..	41.0	21 ..	16.80 ..	69.8	37 ..	28.60 ..	98.6
6 ..	4.80 ..	42.8	22 ..	17.60 ..	71.6	38 ..	30.40 ..	100.4
7 ..	5.60 ..	44.6	23 ..	18.40 ..	73.4	39 ..	31.20 ..	102.2
8 ..	6.40 ..	46.4	24 ..	19.20 ..	75.2	40 ..	32.00 ..	104.0
9 ..	7.20 ..	48.2	25 ..	20.00 ..	77.0	41 ..	32.80 ..	105.8
10 ..	8.00 ..	50.0	26 ..	20.80 ..	78.8	42 ..	33.60 ..	107.6
11 ..	8.80 ..	51.8	27 ..	21.60 ..	80.6	43 ..	34.40 ..	109.4
12 ..	9.60 ..	53.6	28 ..	22.40 ..	82.4	44 ..	35.20 ..	111.2
13 ..	10.40 ..	55.4	29 ..	23.20 ..	84.2	45 ..	36.00 ..	123.0
14 ..	11.20 ..	57.2	30 ..	24.00 ..	86.0	46 ..	36.80 ..	114.8
15 ..	12.00 ..	59.0	31 ..	24.80 ..	87.8	47 ..	37.60 ..	116.6

The *gramme*, to which reference is frequently made, is 15.434 English grains. The centimetre is a fraction less than four-tenths of an inch, and the metre is a fraction less than forty inches.

TEXT BOOK
OF
HOMŒOPATHY

BY

DR. v. GRAUVOGL,
OF NUREMBERG.

PART II.

Entered according to Act of Congress, in the year 1870, by

GEORGE E. SHIPMAN,

In the Clerk's Office of the District Court of the United States for the Northern District of Illinois

SPECIES OPERA SUNT NATURÆ, GENERA SUNT OPERA
HUMANI INGENII!

HOMŒOPATHY.

§. 206.

THE HOMŒOPATHIC DRUG PROVINGS.

IN the foregoing pages, I have occupied myself, not merely with setting forth the principal errors of the physiological school, but also, with this, to discover the mode and manner of their origin, in order actually to demonstrate how we shall *not* act at the bed-side; for, according to the maxim of the scholastic “*contrariorum eadem est sententia*,” we cannot rightly understand a subject, without having its *contrary* sufficiently set forth.

For all those to whom Homœopathy is a strange thing, hence chiefly, for the adherents of those two schools, which have presumed to judge this science by hearsay, the dispelling of these errors, the progeny of the lower train of thought, forms the necessary bridge to the knowledge of Homœopathic theory and practice which move only in the circle of the upper train of thought.

Having thus reached the point where I can fully announce how we may do *better* at the sick bed, I can now express myself much more briefly, because, having already set forth the mode and manner in which the errors of the physiological school arise, the principles are thus established, by which the admissibility of a theory and its connection with practice, may be determined. They are expressed, to complete the maxim of the scholastic, in the motto, *si vis omnia tibi subjicere, te subijce rationi legibusque naturae*!

Would we undertake to make a sick man well again, by the so-called curative means, we must *first* know *how* and *where* we have to search for remedies.

1. As regards the *how*, after what has been adduced, there can be no longer any doubt; for it is by induction that we seek for the *natural laws*, upon which a determinate series of phenomena depends, and *abstraction* permits us to know what laws are presupposed by a particular assertion.

2. Regarding the *where*, we must also know *beforehand*, that, in this circle, the *necessity of natural laws*, and not the contingent, the lack of law, prevails.

Now the *physiological* condition of man is that which consists according to fixed natural laws; here is, consequently, the *where* of the search.

3. His *pathological* condition is his physiological, changed by a material external cause; hence we can change the same with the purpose of its *restitutio ad integrum*, its cure, in no other way, than by taking for this purpose, substances also from the external world, and those substances, moreover, whose similar sphere of action, upon the relatively sound organism, is established by experiment and observation.

4, and finally. We must possess a law of Nature, as a leading principle, according to which we can proceed; according to which that sphere of action of a substance permits a conclusion, (based upon natural law,) touching its use as a remedy.

The adherents of the physiological and ætiological schools, first of all, meet these requisitions with a sneer and the assertion, that no conclusion, as to the effect of a remedy upon a sick man, can be drawn from drug-provings upon healthy men.

As for the first, we may reply, that both these schools have already instituted drug-provings upon the healthy, although they have followed in these footsteps of Homœopathy without any good fortune, since they have connected therewith the maxim, that diseases must be cured with such remedies as causally counteract them, which maxim runs counter to the laws of nutrition and function of the organism, and, consequently, is false, §. 117.

Hence, all these valuable drug-provings of this school are worthless, on account of the hypothesis based upon them; for the problem is, not to destroy the *products* of disease, but to operate against its *causes* and *conditions*.

As regards the second, the physiological school itself teaches, that a physiological nutrition and function of the organism is possible only so long as the condition of the cells and tissues is not disturbed, consequently, is healthy; that thus, as regards parts of the organism which were already changed in their physiological nutrition and function, by external influences, and hence are *diseased*, no efficient relief is any longer to be expected. §. 98.

Both the physiological and ætiological schools must confess that any other way can never be devised. Nevertheless, Virchow is pleased to assert (which is an error,) that "drug-provings upon healthy men," or,

as he expresses himself, this experimental-empirical way, is rather of use for sick animals, and only the *simple empiric*, or the *traditional*, is of use for sick men.

Thus, since Prof. Virchow objects to the experimental-empiric way of discovering remedies, only for the sake of expressing a condemnatory opinion against the principles of Homœopathy, he flies in the face of the exact tendency of our times, and, while he prescribes the traditional method, and hence would have *tradition* and *authority*, §. 2, put in the place of experiment, he requires *faith* in therapeutics in the place of *knowledge*! Hence he decides in favor of faith, consequently against science. That is truly a heavy demand upon the piety of his hearers in the lecture room, and a vain mode and method of bringing his own authority into repute.

§. 207.

We, practicing physicians, would have to reject such doctrines, even if Hahnemann's doctrines were yet unknown.

For Hahnemann's therapeutics, the drug-provings on the healthy, form the foundation pillars of the whole problem. These provings, which we may look upon as a first deductive operation for therapeutics, it was necessary to undertake under various circumstances, at various times and in different places. Since we can only advance from the known to the unknown by means of experiments, we must begin our therapeutic inquiries with such materials as are most familiar to us, and these are the substances of the outer world, which we know, as regards their chemical and physical properties. All changes which we see occurring in the organism, extend themselves merely to our sensations, which give us to know the differences between the characteristics of the previous condition and those of the induced changes. A just discrimination between that which is really perceived by the senses, and that which is a result of this perception, §. 3, indicates the good observer. Thus, a good observer will not say that this or that substance is a narcotic, or that it produces pneumonia, etc., but will see in such phenomena, only *single* specific forms of its reciprocal action with a given organism, and forms indeed, gained from (the use of) the traditional dose, then of the minimal dose, etc.

Since Prof. Wunderlich, §. 147, lays so much stress upon Benzoic acid, in the treatment of pneumonia, and since, moreover, his teacher of Materia Medica, §. 148, holds, in opposition to him, that the therapeutic use of Benjamin flowers has been hitherto somewhat *irrational*, I hence select it as *an example of a Homœopathic drug-proving* and,

also, for this reason, that it will not occupy too much space. It was published in 1854, by Hering, the greatest master of the drug-provers now living in America, and contains all the conditions which Homœopathy requires.

§. 208.

BENZOIC ACID.

(*Acidum benzoicum.*)

HISTORY.

“We should properly distinguish between Benzoic acid and Benjamin flowers. The former may be produced in various ways; but the latter, only from the Benzoin resin, and, although the flowers consist of Benzoic acid, still a very small quantity of æthereal oil adheres to them.

Schreger, indeed, maintains, that, it is this alone which makes it an excitant, increasing exhalation of the skin. He asserts that when it is perfectly pure, Benzoic acid does not differ, in its effects, from the other vegetable acids. Let any one set a salad before this wise author, and dress it with perfectly pure Benzoic acid instead of vinegar; he would soon learn the difference. Dr. Jeanes,* the first prover, as well as others, used the flowers obtained from the sublimation of the resin. Each one can prepare this for himself, without resorting to the many artificial prescriptions of the apothecaries, for these endeavor to obtain the greatest quantity out of the resin, which is of no interest to us. Let a couple of the best pieces of resin be obtained; pulverize them coarsely, add to them an equal quantity of pure sand, put them in a tin spoon; put a funnel of stiff paper over the spoon and subject it to a moderate heat. As soon as it evaporates, the flowers are deposited within the paper.

Dr. Jeanes was led, as early as 1838, to experiment with Benzoin flowers, by an old preparation much abused here in the United States, as well as in England, known by the name of Paregoric, in which Benzoin flowers are found; the *Tinctura opii camphorata* or *Tinctura camphoræ composita*, introduced by LeMure as the asthmatic elixir, and, since 1718, having a place in the English Pharmacopœias; it consists of Opium and Benzoin flowers three parts, Camphor in Alcohol two parts. The symptoms which he experienced from this substance he often saw repeated again in persons who used Paregoric. From

* In Transactions of the American Institute of Homœopathy, 1846.

this, he concluded that the Benzoin flowers, which were held to be a matter of indifference in the Paregoric, were not at all so.

When Dr. Jeanes, guided by the symptoms which he obtained by provings on the healthy, used the Benzoin flowers alone, the beneficial effect thereof was soon very striking, in very many cases, where the urine of the patients had a dark red or brown color, and a very unusually strong urinous odor.

In 1842, Dr. Alexander Ure recommended the Benzoic acid to prevent the deposits of urates as vesical calculi or gouty concretions. He rested upon his experiments, in which, Benzoic acid, taken an hour after a meal, appeared again in the urine as Hippuric acid. Now, since, at the same time, no Uric acid was to be discovered, and, since hippurates are far more soluble than urates, Ure concluded thence, that the Benzoic acid was changed into Hippuric acid and that the latter appeared in the place of the Uric acid; thus, the hippurates which are quite soluble, appeared in the place of the urates, which, as concretions, are both painful and dangerous.

But Wöhler had declared in 1831 even, that Benzoic acid, on its way through the body, was changed into Hippuric acid. Keller confirmed this by an exact experiment, and declared indeed, that, since the Benzoic acid seemed to be so utterly harmless for the health, it would be easy in this way to procure great quantities of Hippuric acid; a person might be kept for this very purpose, who might keep up the fabrication of this article for weeks together.

Keller, however, contradicted Ure's assertion as regards the lack of Uric acid. He found the usual quantity of it in the urine, together with the Hippuric acid, and he considered the proposition to use Benzoic acid against the uratic concretions of gouty persons and the uratic calculi of the bladder as hasty.

Ure seemed to imagine that the Uric acid was used to change the Benzoic into Hippuric; but, since he had made his experiments on the urine of an arthritic patient, it may be assumed that the urine of this patient, in other circumstances, contained no Uric acid.

Pereira says, that he has seen the same thing as Ure, in a rheumatic patient. On the contrary, no diminution of Uric acid was found by James, Brosh and Boge, (*Med. Times*, Nov. 1845). Thus they confirmed Keller's observation.

Barring Garrod thought that, after the use of Benzoin, he had found a constant diminution of the proportion of urea. Simon could not confirm this. Lehmann, also, (*Phys. Chem.* 2, 411,) found, in four observations, in the urine passed in the twenty-four hours after the use of Benzoic acid, that there was no diminution of its nitrogenous proper-

ties, but added, that, on account of the great difficulty of making such observations, no conclusion could be drawn from them.

The chemists have not yet settled the question in what way this transformation takes place. Even the similar Cinnamic acid is converted into Hippuric acid. (Erdmann. Journ. f. pr. Chemie, 18, 35; 26, 491; 35, 307).

Liebig (Thierchemie,) adds to two atoms of Benzoic acid 2 (C^{14} , H^{20} , O^6 ;) the atoms of the lactate of urea, and obtains thereby two atoms of Hippuric acid 2 (C^{18} , N^2 , H^{18} , O^6). Ch. Hoffmann (Grundl. d. Phys. und Path. Ch.) considers this transition as probably occurring by the absorption of Ammonia. Since, on the other hand, in putrid urine, the Hippuric acid goes over again into Benzoic acid, (compare Lehmann, Phys. Chem. 1, 88,) this urine may be decomposed into Ammonia, Carbonic acid and Benzoic acid, under the absorption of oxygen. If this happens by the transformation of the Benzoic into Hippuric acid, then Ammonia would be thereby taken up and *oxygen given off*.

Many things could be explained by this, if it were only demonstrated to be true. It is highly probable, however, that the transformation of Benzoic into Hippuric acid, occurs in a different manner than that of the latter into the former. The fact of these transformations, however, is quite indisputable. The decomposition of the Uric acid, on the contrary, as conjectured by Ure, is highly improbable, and, on this account, Ure's recommendation of it in gout and vesical calculus, etc., is utterly to be rejected. Nevertheless, numerous therapeutic experiences have spoken in favor of that proposition. We shall see this, partly in the detail of the symptoms, and partly in accompanying cases of cure. Here again, also, Homœopathy comes in between two confused party views, explaining and rectifying; according to one of these views, the remedy is to be universally extolled as valuable, while, according to the other, it is rejected as unsuitable; this she does in a practical and useful manner, by indicating the cases where the remedy does and must work favorably, while she theoretically adds new riddles to the old, riddles for whose solution she must arouse the inquirer, since the solution of the new will also be, for them, a solution of the old.

According to Jeanes' experience, Benzoic acid cures very many cases of disease, where the urine is of a very deep color, and of a very strong urinous odor, and all the same, whether this was accompanied by Uric acid deposits or not, though perhaps less when this latter was the case; and, that indeed, in doses too small for this effect to be explained chemically. And Benzoic acid, according to the provings of Jeanes, Keller,

Lingen, Nusser and Petroz, which were instituted upon the healthy, produces no such urine, but rather an aromatic urine.

The solution of this apparent contradiction belongs to another place. Here we have only the mere history.

Benzoic acid was one of the substances used for embalming the dead, and it is still used in the Orient, as its resin diffuses a grateful odor; subsequently as a cosmetic, the resin dissolved in Alcohol and precipitated with water; as a milk, it once made a sensation in Leipsic. It was also used for wounds; and, as an expectorant, though subsequently it was banished as useless when given internally. Suddenly recommended as a chemical remedy in case of uratic deposits, although on erroneous grounds, it nevertheless showed itself efficient in such, as well as in many other, cases, especially where the urine was offensive. So finally the story ended where it began, and if any one fumigated the offensive commode with Benzoin, he gave, without knowing it, the curative remedy to the patient.

§. 209.

CASES OF CURE.

Dr. Jeanes has given this medicine since 1838 in very many cases, and always then, with the greatest benefit, when the urine was dark red or dark brown, and, at the same time, its odor was particularly strong. By this, as is self-apparent, is not meant the ammoniacal odor of decomposing urine, but that peculiar urinous odor which sometimes, and, under many changes, is very penetrating and may even be offensive.

This kind of urine, Dr. Jeanes observed most frequently in syphilitic cases, and very especially after gonorrhœa, if the symptoms presenting themselves exteriorly had been suppressed; even in some cases, immediately after the contagion and before the formation of a chancre, or any syphilitic gonorrhœal discharge; less frequently this urine was noticed as an accompanying indication of the above-mentioned diseases. The odor is often so marked that it causes the patient himself to speak of it to the physician.

1. A young man 17 years of age got a chancre, and took, upon the advice of his acquaintance, Balsam of copaiva and other medicines. The chancre disappeared, and the following symptoms presented themselves: Round ulcerated spots, somewhat elevated, of a warty appearance, from an inch to an inch and a half broad, here and there running together, in the crotch and about the same; on the buttocks,

nearly covering the inner sides, very sensitive and painfully sore. Thuja and Merc. had but little effect. Benzoic acid, in a high potency, changed the urine, which was highly colored and strongly smelling; a single dose brought it to its normal state and improved the ulcer. As often as the urine assumed this condition again, the dose was repeated, and, with so good a result, that it was given to him every two or three days, till the cure was complete.—JEANES.

2. I was called to a man 25 years of age and found him suffering from a very tormenting, incessant, short, dry cough. His room-mate said to me, that he thought that he had some syphilitic trouble, because his urine had the above-mentioned property. He himself knew the significance of the symptom; had been treated by me for syphilitic rheumatism and improved very much by Benzoic acid. On inquiry, it was found that this patient had had a gonorrhœa shortly before the commencement of his cough, which had been treated in the usual way, with Balsam of copaiva. The Benzoic acid very soon restored the usual state of the urine again, and relieved the cough so that it was no longer troublesome.—JEANES.

3. A man 23 years old had been sick; about two years before, a chancre had been driven away by external treatment, and he now suffered from syphilitic rheumatism. As soon as he used the Benzoic acid, the rheumatism disappeared and the chancre returned again. This latter I did not have a chance to cure; the patient had recourse to his usual physician, who, by internal and external means, removed the disease and without any return of the rheumatism. My experience with this disease is very limited, especially with the first stages, since I take such patients very unwillingly; they appear to me, however, to warrant me in recommending the Benzoic acid in the primary, but, especially, in the secondary forms of syphilis and gonorrhœa.—JEANES.

4. But not only in such cases, in many also where there is not the least suspicion of such a contagion, our remedy is of the greatest use. In anginae, (angina faucium and angina tonsillaris,) where the urine has the above mentioned property, it is remarkably efficient. In two cases, a mother and her daughter, who had both been inclined for a long time to violent inflammations of the throat, where Allopathic treatment, ever so early and energetically employed, had never succeeded in preventing suppuration, and where, in case of the daughter, even Homœopathic treatment with Belladonna, and other apparently similar remedies, had twice failed to prevent suppuration, although the sufferings were much more relieved thereby than by the usual treatment, in these cases, Benzoic acid alternated with Belladonna and Digitalis, afforded relief, as they cut short the paroxysm very promptly,

prevented suppuration and, finally even the tendency to similar attacks seemed to be extinct.—JEANES.

5. A man had attacks of nephritic colic every year; the urine was deep red and of a strong odor. The Benzoic acid afforded great relief, two years ago in an attack, and since then he has had no other attack, though no other change was made in his manner of living.—WILLIAMSON.

6. A man 37 years of age, lean, of sedentary habits, consulted me on account of a disorder of the urinary secretion. Ten months ago he observed, for the first time, a whitish sediment in his urine, forming upon the vessel, very soon, a hard, gray crust, most difficult to remove; the urine had a very offensive smell, and often changed its color, was now greenish, now brownish; at times it was somewhat turbid, bordering on a pale yellow, of a pungent ammoniacal odor; the reaction with litmus paper was alkaline, and it effervesced on the addition of a few drops of Hydro-chloric acid; immediately after it was passed, it formed a white flocculent sediment, consisting of the phosphate and carbonate of lime; it contained no Uric acid; sp. gr. 1.023. The urine was passed without pain or difficulty, and in a full stream, but contained no more mucus than usual, and no albumen.

The patient's appetite was good, the tongue clean, he slept well; he was pale, however; complained of lassitude and a sense of weariness and heaviness across the loins; he was usually constipated. A thousand grains of the urine, evaporated in a water bath, with a heat not over 160° F., gave only 36 grains of dry extract, giving off, while it was drying, much Ammonia and, at once, blueing moist and reddened litmus paper.

The patient was directed to take an aperient dose of Rhubarb and 10 grains of Benzoic acid, twice a day, together with a nourishing but simple diet.

On the fourth day, he had taken the medicine without observing the slightest unpleasantness. He said "that his urine, within a few hours after the first dose, became clear and free from the chalky sediment." The urine is now normal in every respect; reddens litmus: sp. gr. 1.022, (thus $\frac{1}{1000}$ lighter). He used the Benzoic acid six days longer, and then ceased.

After fourteen days the urine became alkaline. In order to see whether it would remain permanently changed by the remedies usually recommended in such cases, these were used, but without effect. But, as soon as the Benzoic acid was used again, it had again its favorable effect.—FARQUHAR.

7. In many cases of rheumatism and gouty concretions, with pain in the joints, the use of the Benzoic acid was of the greatest service. Strikingly good results were seen from its use in case of gouty pains in the joints of the great toes, with very great swelling and redness, mostly confined to these parts; the urine was of the above mentioned character. I have quite lately spoken with a patient who had been previously very often troubled in this way, and, six years ago, took Benzoic acid, by means of which the pains disappeared in twenty-four hours, and did not return again until several weeks ago, and then only in a slight degree.—JEANES.

8. In a case where inflammatory rheumatism and violent asthma were conjoined, and had reappeared in this manner for a long time, for which Benzoic acid was given, the patient noticed a great improvement of the asthmatic symptoms. This deserves mention, because the Tincture of Opium, containing Benzoic acid, was previously called Elixir asthmaticum. Further observations will show whether Benzoic acid may be useful in some particular forms of asthma.—JEANES.

9. *Württemberg Correspondenzblatt*, 1844. Acid. Benzoic. efficient against arthritis nodosa. A weaver's apprentice, 20 years of age, had on both wrists, between the metacarpal bones, copious gouty deposits and swelling of the elbow joints. The ankles, also, were not free; the general condition was good. He received every day, an hour after dinner, a drachm of Benzoic acid. Some improvement followed as soon as twelve days; after sixty-nine days, there was very great improvement; after six months, a cure. During the time, he experienced no unpleasant effects except occasional indigestion, pressure in the stomach, eructations, bitter taste. The exhalations from the skin were less than usual during the cure; the stools were natural; the urine copious, somewhat turbid, otherwise of a natural color and odor. After 20 drachms of Benzoic acid had been taken, no Benzoic acid was found in the urine, but traces of Urea (?!) and also traces of Hippuric acid.—DR. HAUFF.

10. In old gouty concretions, it is one of the best of remedies after Colchicum and other remedies cease to have effect. After a while, it must be followed by another remedy, after which it may be given again with advantage.—NEIDHARD.

11. Gave relief in many cases where there was a sore pain in the region of the left kidney, in which concretions of urate of ammonia were in the urine, the pains being relieved and the quantity of urine increased. It afforded relief, only when other remedies had been previously given without benefit. Then it removed quickly, and entirely, the hot, burning pains in the left kidney, with drawing,

especially on stooping, stiffness in the loins, swelling of the right knee, with sore pain of the whole leg.—NEIDHARD.

12. Acute, burning, tearing pains in the right kidney, less in the left, extended to the groins and bladder; behind the neck of the bladder it was sensitive to the touch; the pains produced vomiting, delirium, obscuration of the sight, constant, extreme restlessness. Ol. Tereb. had been given without effect; Belladonna merely relieved the restlessness; Acid. Benzoic., $\frac{1}{10}$, cured.—NEIDHARD.

13. Goldschmidt's Lebensbilder, Oldenburg, 1844. A young man suffered from a pneumonia of an asthenic character. The strength of the patient sank daily, the difficulty of breathing increased every hour, to a frightful degree. In this strait, of the patient and the physician, Goldschmidt (then chief physician in Oldenburg) opened his Pharmacopœia, and, with its great letters, Flores Benzoës beamed upon him, of which, as an obsolete remedy, he had never thought. On the spur of the moment he prescribed it. The greatest effect ensued; the difficulty of breathing gradually remitted and the patient recovered. (He had learned something from Rademacher).

§. 210.

LIST OF SYMPTOMS.

J. Indicates Dr. Jeanes' symptoms, who used various attenuations, from the 1st centes. to the 15th, both with sick and healthy.

L. Dr. Lingen's symptoms, who took of the spirituous solution ($\frac{1}{2}$ grain to the ounce), five drops every morning and evening, for several days; thus about 0.005 gr. at each dose.

N. Indicates Dr. Nusser's symptoms, who took, at 5 P.M., 80 grains of the 2nd trituration; thus 0.125 of the acid. After eight days, nearly all symptoms ceased.

P. The symptoms of Petroz from the Allgem. Hom. Zeit.

* Indicates, as usual, the curative effects.

Morale and Intellect.

. Sadness. P.

. * The mind is inclined to dwell upon unpleasant things. If he saw any one who was deformed, it made him shudder. J.

. * Sense of anxiety, 10; while sweating, 301.

— b. After mental emotions, headache, 25.

. Activity, afterwards anxiety. P.

5. He was much surprised, that, while writing, he omitted words every moment, which never was the case before. 6, 7. T. N.

Head.

. Excitement and lightness of the head, when sneezing in the morning. 173.

. Vertigo, as if he must fall sidewise, mostly in the afternoon. P.

. Confusion of the head and sleepiness. 6.

. Confused head. P.

10. Pressure upon the whole upper part of the head and of the whole spinal column, as if it were pressed together like an elastic body, so that he stretched himself involuntarily and bent forward. This sensation, without being painful, produces extreme anxiety, two days in succession in the forenoon, while sitting. L.

. Sensation of weariness (in the head?) as from sleepless nights. P.

. Sensation as if there were air in the head. P.

. Formication in the forehead. P.

. Sensation of coldness in the head. P.

15. * Pain and heat in the organs of reverence and firmness. J.

. Pain in the temples, in the region of the organ of mechanics. J.

. Pain in the left temple. J.

. Hammering in the temples, requiring him to bend forwards. P.

. Hard throbbing of the temporal arteries. L. 216, 217.

20. A sound in the ears like hissing, hindering him from getting to sleep again. 217.

. Sensation of beating in the head. P.

. Internally, a pain as of having been beaten in the parietal bones. P.

. Tearing pain in the vertex. P.

. The symptoms of the head generally manifest themselves with depression, lassitude and loss of appetite. P.

25. The head symptoms occur readily when one uncovers himself, exposes himself to a draught, after mental emotions, in the morning on awaking. P.

. The head symptoms are worse during rest, return again periodically, are often accompanied with pains in the stomach, nausea, gagging and cold hands. P.

. Rheumatic pain on the outside of the head. P.

. Cold sweat on the head. P.

. Itching of the hairy scalp. J.

Eyes.

30. Throbbing in the eyeball. P.

. Distressing sensation in the eyes, as if one had not slept. P.

. Burning heat in the eyes. P.

. Burning heat in the lids. P.

. Itching in the outer, and, then in the inner, angle of the right eye. J.

35. The eye-symptoms occur readily in the open air, when walking, when reading by artificial light. P.

Ears.

— Purring in the ears. 217.

. Sensation as of a sound of confused voices, chiefly when swallowing or when walking in the open air. P.

. Trembling in the ear. P.

. Intermittent stitching in the right ear. P.

. Itching in the left ear. J.

40. Swelling behind the ears, which seems to reach the periosteum. P.

Nose.

. It seemed to him that he smelled dust, cabbage, or something stinking. Compare Taste. 97, 98.

. Diminution of sense of smell. P.

Nose bleed. P.

. Irritation in the left nostril, such as precedes sneezing, yet without being able to sneeze. J.

45. The flowers, when snuffed, are said to be a strong sternutatory. Lewis' Mat. Med.

. Sneezing and hoarseness. L. 173.

. Clears the head by sneezing. Schröder.

. A cold in the head readily occurs from exposure to cold; is renewed every day. P.

. Heat during the coryza. P.

50. Pressure at the root of the nose. P.

. Pain in the nasal bones. P.

. Sensitiveness of the nose. P.

. Itching of the septum of the nose. J.

. Redness in the corners of the nose. P.

. The symptoms of the nose occur chiefly in the evening. P.

— b. When blowing the nose, symptoms in the trunk.

Face.

- . Sense of pressure, and as if the face had gone to sleep.
- . Tension in one side of the face. P.
- . Trembling of the lips. P.
- 60. Burning heat of the face. P.
- . Burning heat of only half of the face. P.
- . Heat about the mouth. P.
- . Circumscribed redness of the face. P.
- * Little blisters and red face. Schröder.
- 65. * Coppery spots on the face; the Benzoin milk. Venus-milk. A.
- . Itching of the chin. P.
- . Cold sweat on the face. P. with heat. N. 297.
- . The symptoms of the face are relieved by external heat, by pressure, by friction. P.

Tongue.

- . Tongue with a white mucous coat in the morning. L.
- 70. Velvety coat upon the tongue. P.
- . Tongue of a somewhat bluish color. P.
- . Sensation of soreness and rawness at the root of the tongue and on the palate. J.
- . Soreness of the back part of the tongue, felt most while swallowing. J.
- *. An ulcerated tumor in the left side of the mouth, upon the soft commissure of the jaws, behind the last molar teeth. J.
- 75. * Extensive ulcerations of the tongue, with deeply chapped or fungoid surfaces. J.

Note. In both cases, there was not the least suspicion of syphilitic affection; in both cases, the same urine as in 148. J.

Teeth.

- . Involuntary biting of the lower lip at dinner, on two successive days. L.
- . Slight cutting pain in the teeth. J.
- . Stitches in a right lower hollow molar. J.
- . Slow jerking in a right upper molar. J.
- 80. * The Benzoic oil has been given for toothache. A.
- . The resin has been used as a chewing gum in toothache. Schröder.

Throat.

- . Sensation of heat and scratching in the œsophagus and throat. Pereira.

. Extremely unpleasant scratching in the throat. Lehmann, Phys. Chemie.

. Collection of mucus in the throat. P.

85. It feels as if there were little lumps in the pit of the throat, as if food were sticking there. Fr. Husmann.

. Mucus somewhat sour. P.

. Difficult swallowing. P.

. Incomplete swallowing. P.

— When swallowing, noise in the ears. 36.

. Soreness on the back part of the tongue. 73.

. Sensation as of a swelling in the throat, or as from constriction. P.

90. The mouth- and throat-symptoms are relieved upon eating. P.

. * Angina faucium and angina tonsillaris, with the characteristic urine. (148) J.

. Heat in the œsophagus, as from acid eructations. J.

Taste.

. Bitter taste, with pressure at the stomach and eructation. Hauff.

. Bitter taste on drinking coffee or milk. P.

95. Salty taste of the food. P.

2—. Flat, soapy taste after drinking water. P.

1—. After taste of the food. P.

. The bread tastes smoky. P. Compare Smell, 41.

. Taste of blood. P.

Stomach.

100. More appetite in the evening. P. Loss of appetite mornings. 24, and nausea. 216.

. In the evening, thirst with sleepiness. P.

. Singultus. J.

. Loathing sickness at stomach, pain and discomfort. P. With gagging, with disturbances about the head. 26.

. Bitter vomiting.

105. Vomiting of a salty substance. P.

— Pains in the stomach, with the head ailments. 26.

. Increase of the stomach symptoms when walking, chiefly on ascending, especially in case of pregnant women. P.

. Sensation of warmth in the stomach. P. Burning in the stomach. Honigberger.

. Pressure in the stomach. Eructations. 93.

. * Weakness of digestion. Flatulence. Benz. Composita.

— While eating, sweat, 300. After eating, the throat symptoms are better; after drinking, palpitation of the heart. 214.

Under the Ribs.

- 110. Feels wearied (?) from pressure of the clothes. P.
- . In the region of the liver, constant, fine but violent stitching, mid-way in the upper portion thereof, it seems to be superficial, and is not increased by pressure. 7, day. N.
- . * Obstruction of the liver. Honigberger.
- . Pain in the left side of the abdomen immediately below the short ribs. J.
- . Pain in the left side. Honigberger.
- 115. Sensation of heat throughout the abdomen. J.
- . Cutting about the navel, relieved by stool. P.
- . Tearing belly-ache. P.
- . Tensive pain in the loins.

Anus and Stools.

- . Constriction of the rectum at its lower end. P.
- 120. Stitching in the rectum. P.
- . Fine stitching in the anus, on the evening of first day. N.
- . Titillation (creeping) in the anus. P.
- . Ineffectual urging to stool. P.
- . Uncommon discharge of wind downward in the afternoon and evening of first day. N.
- 125. Creeping chills before the stool. P.
- . Insufficient stool. P.
- . Frothy stool.
- . Putrid, bloody stool. P.
- . Bowels freely open, with extraordinary pressure to stool.
- b. Relieved after the stool. Cutting. 116.
- 130. . * Fætid, watery, white stools, very copious and exhausting in infants, the urine being of a very deep red color. J.
- . * Diarrhœa of children; the discharge is copious, watery, clear-colored, very fætid; the urine, at the same time, is uncommonly deep red and the urinous odor very strong; in very many cases, curative, or at least, relieving. J.

Kidneys, Bladder and Urine.

- . Dull pain in the region of the kidneys.
- . * Nephritic colic. Williamson.

— b. * Sore pain in the region of left kidney. Neidhard. *11, in the right, *12.

— c. * Hot burning pain in the left kidney, with drawing, when stooping. Neidhard.

. A scruple, taken an hour after a meal, was followed, in some hours, by five or six ounces of urine; on adding Hydrochloric acid to this, an abundant precipitate of Hippuric acid appeared, but no trace of Uric acid. Ure.

135. Not the Uric acid but the urea disappears. Garrod.

. After thirty-two grains of pure Benzoic acid, taken in the evening before going to sleep, the morning urine re-acted uncommonly sour, even after having been evaporated, and standing twelve hours, where-upon only the usual sediment of earthy salts presented itself. The urine contained Hippuric acid, united to a base, in great quantity. Uric acid and urea were both contained therein, apparently in normal quantity. Keller.

. Increases the acid of the urine and makes it slightly irritant. Garrod.

. One of the few acids which manifestly increase the acidity of the urine. Lehmann.

. * Irritability of the bladder. (Compare 146, 147, 153, 154), too frequent desire to evacuate the bladder, the urine normal in appearance. J.

140. Urine, at first, increased in quantity only, and not in frequency. In a few days, urination became exceedingly frequent, with strong pressing and discharge of a clear urine. Urine of an aromatic odor and saline taste, the odor long retained; most in the forenoon. (Lingen.)

. Decrease of the quantity of the urine. P.

. Thick urine. P.

. Bloody urine. P.

. Urine more copious, somewhat turbid, otherwise of a natural color and odor. After the daily use of a drachm, after dinner, no Benzoic acid was found in the urine, traces of urea and only mere traces of Hippuric acid. Hauff.

145. * Morbid condition of the urine, as in persons with calculus or gouty diathesis. Ure.

— b. * With concretions of urate of ammonia. Neidhard.

. * Dysuria senilis, when the gravel is trifling and the irritable state of the bladder and the pain is induced by other causes. (With Bals. copaiv.) Walker.

* Sensibility of the bladder, with muco-purulent discharges. Enlargement of the prostate. (With Bals. copaiv.) Soden.

. * *Urine highly colored*, sometimes of the color of brandy, the *urinous odor exceedingly strong*. J.

. * Urine of the above character, of a specific gravity greater than that of healthy urine; passed into the same vessel, it retains its place below the healthy urine without admixture, and, though of a very deep red color, deposits no sediment. J.

150. * Hot, scalding urine, of a deep red color, and strong odor, causing so much suffering in its passage, that this was performed but once a day. J.

. Dark or highly colored offensive urine, quite peculiar, after suppressed Syphilis and Gonorrhœa. In many cases. J.

Remark. The Gonorrhœa was, in most cases, suppressed by Bals. copaiv.

. * *Fætid urine, with prolapsus uteri*. C. Hg.

. * Never saw anything so effectual; the urine was clearer after the first dose, and in two days was entirely free from mucous deposits; the irritability of the bladder was diminished, and, in four days, the patient could be left to himself. Soden.

. * Dark reddish brown urine, of greater specific gravity, with a sour reaction, even after some weeks—at the same time, many fleeting pains deep in the region of the bladder, not when urinating, but at other times; also with deposit of mucous granules, and, when standing, becoming, in a few days, covered with a thick filmy, crust. $\frac{1}{20}$ of a grain of the undiluted acid. C. Hg.

155. * In cases with an excess of uric acid in the urine, the urine becomes normal after the use of Benzoic acid. G. Bird.

. * Enuresis nocturna of children, where Nitrum failed. Young.

. * A granular kind of mucus, mixed with phosphates in the sediment of the urine. Garrod.

Affords no relief where there are phosphates in the sediment. G. Bird.

* Vesical catarrh. G. Bird.

160. * Urine of a very repulsive odor, of a changeable color, brownish, cloudy, of an alkaline reaction; effervescing with hydrochloric acid; white, flocculent sediment in the urine immediately after its passage, consisting of the phosphate and carbonate of lime, without uric acid. The patient was pale, languid, with a sense of weakness in the loins. Farquhar.

Sexual Organs.

. Painfulness of the sexual organs. P.

. Splitting pain in the sexual organs. P.

- . Pressure at the sexual organs. P.
- . Smarting of the frænum præputii. J.
- 165. Itching in the sulcus, behind the corona glandis. J.
- . A thrilling, almost painful, sensation on the left side of the glans penis, extending into the urethra, so severe as to occasion starting, ending in a sensation of tickling and itching. J.
- * Gleet. Honigberger.
- Menstruation too early. P.
- 170. * In amenorrhœa. Tinct. benz. comp. A. A.
- . Weakness after the menses. P.
- b. With pregnant women, gastric derangements, when ascending a height. 106.
- . Lochiæ too long continuing. P.

Respiration and Cough.

- . Slight transitory hoarseness and thrice repeated sneezing, in the morning, with a pleasant excitement and lightness (Leichtigkeit) of the head, which, together with its more rapid disappearance, distinguished it from the ordinary symptoms of taking cold, of the prover. L.
- . The respiration, at times, somewhat whistling; the second day. N.
- b. Difficulty of breathing on awaking. P.
- 175. * Asthma with inflammatory rheumatic complaints. J.
- . Sense of roughness on the chest. P.
- . When the fumes of Benzoin alone are produced they occasion a cough. Schröder, Arzneischatz.
- . Violent cough from inhaling the fumes. Pereira.
- . Produced an exhausting cough in healthy persons; the flowers. Med. Zeit. Russlands.
- 180. Rather increased than diminished the cough. Pereira.
- . Slight hacking cough, directly after rising, the second day. N.
- . Cough after a slight cold. P.
- . Cough excited by inspiration. P.
- . Cough seems produced by something acrid or dry in the chest.
- 185. Given for a tormenting tight cough, every powder produced a violent cough, then extraordinary weakness, sweat, and a state of coma lasting an hour; at the same time, the skin is paler and cooler; the pulse weaker and less frequent; respiration normal. *From the sublimated but not purified flowers.* Ilisch. in Med. Zeit. Russl., 15, 1852.
- . Cough, followed by expectoration of greenish mucus. P.
- . Copious secretion of mucus in the bronchi. P.

* It is said to furnish the greatest relief in diseases of the chest; relaxes the obstruction of the pulmonary vessels, and promotes expectoration. Lewis' Mat. Med.

. * Mucous oppression of the lungs; a mucous state of the lungs. A. A.

190. * Is good for the lungs; is used internally in catarrhal diseases of the lungs, cough, and asthmatic attacks. Schröder.

* The flowers are used in weaknesses of the chest and lungs, and for asthma. Schröder.

* Troublesome, constant, dry, hacking cough, after suppressed gonorrhœa. J.

Chest.

. Morbid restlessness in the chest. P.

. Sensation in the chest as if it were swollen. P.

195. A cutting sensation in the chest. P.

. Painful trembling in the chest. P.

. Sense of weakness in the præcordia. P.

. The pressure of the clothes upon the chest is annoying. P.

. Pressure upon the ribs. P.

200. Pain about the third rib on the right side, midway between the sternum and the side; increased by respiration. J.

. Pain in the left side about the sixth rib, increased by deep inspiration, and by bending the body to either side. J.

. Stitching in the right side of the chest. P.

. Fine, slight stitches in the middle of the chest; evening of the first day. N.

. Pain sometimes in the middle of the breast; a kind of stitching; the second day. N.

205. In the evening, in bed, somewhat of stitching in the chest, especially on breathing deeply; the first day. N.

* In the last period of simple pneumonia, where great weakness prevails. Schreger.

* Typhous pneumonia; asthenic affections of the chest. Schreger.

* Asthenic pneumonia of a young man: after the strength had sunk daily, the difficulty of breathing increased every hour, till it attained a fearful degree. Goldschmidt. * 13.

. Burning in the thymus glands (nipples.) P.

210. Sensation of swelling in the mammary glands; also in the thyroid gland. P.

Heart.

- . *Pain in the region of the heart.* J. Compare 234, 260, 274.
- . The pains change their place incessantly and suddenly, but are the most constant in the region of the heart. J.
- . Wavy palpitation of the heart. P.
- . Palpitation of the heart while sitting; also after drinking. P.
- 215. Palpitation of the heart with trembling. P.
- . Awakens after midnight with violent pulsation of the heart and the temporal arteries (pulsation 110 in the minute) without external heat; and cannot fall asleep again. In the morning, the tongue covered with a white mucous coat; some nausea and total loss of appetite. Had eaten peaches in the evening. In the afternoon, at four o'clock, all these symptoms had vanished (the fourth day.) L.
- . *He awakens every morning about two o'clock, from strong internal heat, and a hard, bounding but not quickened pulse, so that he must lie awake upon his back, because the pulsation of the temporal arteries sounds like puffing in his ears, and prevents him from going to sleep again (enduring for eight weeks).* Lingen.
- . Intermittent pulse. P.
- Accelerated pulse; the first, second and third days. L.
- 220. Pulse slow. P.
- . Pulse full.
- . Pulse slower and weaker. 185.

Neck and Trunk.

- . The thyroid gland feels swollen. 210.
- . Stiffness of the neck; but merely on *one* side. P.
- . Deep, penetrating pain in the posterior part of the left side, about the sixth rib; the second day. J.
- 225. Pain in the right side of the back, between the tenth dorsal vertebra and the side. J.
- . Dull pain in the back, in the region of the kidneys. J.
- . Pressure upon the spinal column. L. Compare 10.
- . Pressure in the back. P.
- . Violent itching in the back. P.
- 230. Trembling in the lumbar region. P.
- b. * Stiffness in the loins, with pains in the kidneys. Neidhard.
- . Sense of coldness in the sacrum. P.
- . The symptoms of the trunk are especially felt, when one moves after sitting a long time; at night, when one turns in the bed, and on blowing the nose. P.

Upper Extremities.

. Sensation as if swollen in the axillæ. P.

. A pain passes from the right hand and appears in the left arm, extends downwards into the elbow, and next appears in the region of the heart; later in the right thigh and ankle. J.

235. Fine or severe stitching, on the outer surface of the right arm; afterwards on the left arm, inner surface; in the evening of the first day. N.

. Tearing below, in the right radius. N.

. Tearing at the outer surface of both wrists, as if in the bones; the third day. N.

. Tearing pains; apparently in the bones of the arm. P.

. Tearing in the metacarpal joint of the left thumb. N.

240. Paralytic pain of the fingers. P.

. A kind of itching in the palm of the right hand, with slight, but deep tearing in the upper metacarpal joints of the little and ring-fingers; in the evening of the first day. N.

. Pain in the joints of the fingers of the right hand. J.

. The fingers are as if swollen; a ring becomes too small; the second day. N.

. The fingers remain somewhat swollen; therewith tearing and fine stitching in various parts of the limbs, especially in front at the metatarsal joint of the right great toe; the fourth to the seventh day. N.

245. Tearing deep in the upper joints of the left index finger; the second day. N.

— b. Cold hands with head-symptoms, 26.

. Breaking out of red spots on the fingers. P.

Lower Extremities.

. Pain in the right hip. J.

. Gnawing pain in the left hip, then in the thigh, next in the knees, then in the toes. J.

. Pain in the left hip, in the knee and the toes at the same time; the worst in the toes; leaving the toes, it seats itself in the muscles of the calf, and then in the knee. After it has left these parts, it appears in the right thigh and ankle. J.

250. Sensation as if the lower extremities were girt about with a band.

. Tearing pain in the anterior surface of the thigh. P.

. Pain in the right knee. J. — N. 267; in the left, 249; in both, 248.

. Drawing pain in the knees after drinking wine. P.

. Sense of dryness in the knee joint. P.

255. Cracking in the knee joints. P.

— b. * Swelling of the right knee, with pain as of ulceration of the whole leg, with pains in the kidneys. Neidhard.

. Feeling of coldness in the knees, as if they were blown upon by a cold wind; the ninth day. J.

. Pain in the gastrocnemii. J.

. Sharp pain in the left ankle, during the time it supports the weight of the body while walking. J.

260. When supporting a slight part of the weight of the body upon the left foot, severe pain in the tendo Achillis, close to the os calcis. J.

Pain in the right tendo Achillis and in the region of the heart at the same time. After leaving the right, the pain appears in the left tendo Achillis.

. *Tearing and stitching, especially in the metatarsal joints of the right great toe.* N.

. Pain in the toes. J. Compare 248, 249.

Numbness in the toes. P.

265. Stitch passing perpendicularly upward, through the right great toe, followed by a burning, which increases gradually to a stitch; appearing, afterwards, in the left great toe, from which it vanishes with a thrilling sensation, in the morning, whilst lying down (the eighth day.) Lingens.

. Deep, persistent tearing in the posterior joint of the great toe; the second day. N.

. In the small toes of the right foot, especially in the middle joints, a kind of deep, sensitive tearing; similar tearing, subsequently, in the right knee, the lower joint of the metacarpal bone and of the left thumb, and in the radius of the right fore arm, etc.; the second day. N.

* Pain in the large joints of the great toe, with slight tumefaction and redness. J.

. Cold feet. P.

270. Cold sweat on the feet. P.

Limbs and Strength.

— b. Trembling, with palpitation of the heart, 215; in the loins, 230.

. Extreme weakness, sweat, and comatose condition. 158.

. Weariness and lassitude, 24; of the lower extremities. P.

. Knots in the joints of the upper and lower extremities, knicking and cracking on motion. J. In the knees. P.

. The pains are incessantly and suddenly changing their location, but their most constant seat is the region of the heart. J.

275. Tearing and fine stitches in various parts of the limbs. N.

. * Syphilitic rheumatisms. J.

. * Gout, contractions, rachitis; by fumigation. A. A.

—b. * Old gouty concretions. Neidhard.

. * In both wrists, between the metacarpal bones, abundant gouty deposits, and swelling of the elbow joints. The ankle, also, is not free. A drachm, every day, for six months. Hauff.

. * Hysterics: the resin. A. A.

Sleep.

280. Sleepiness, with dullness of the head. J.

. Too lively to sleep.

. Sleep endurable, somewhat disturbed by dreams, the first day; the following day, good. N.

. Waking with difficulty of breathing. P.

. Starting up from sleep. P.

285. Awakes after midnight, with palpitation of the heart; every morning, at two o'clock, with heat and hard pulse. Throbbing of the temporal arteries prevents his getting to sleep again. 217.

. Comatose condition. 185.

. Deep sleep. P.

Fever.

—b. Cold hands, 26; feet, 270; sweat of the feet, 269; coldness of the back, 231; in the knees, 256; cool, pale skin, with sweat, weakness and coma, 185.

Coldness, with feeling of heat. P.

. Coldness, then heat and sweat. P.

—b. Chilliness, before the stool, 125.

290. Violent internal heat on awaking. L.

. Sense of heat in the œsophagus, 92; in the stomach, 107; in the belly, 115. J.

. Heat, with sweat, P; heat, with cold in the head, 49; with nightly palpitation of the heart, 216.

. The crystals produce sweat in syphilis, with very great benefit, especially when mixed with Guaiacum. Schröder.

. Copious night sweat, after taking 32 grains, in the evening; the first night, not the following, from repeated doses. Keller.

295. Subsequently, a very copious perspiration. Lehmann.
 . Gentle, universal exhalation from the skin; evening of the first day. N.
 . In the morning, in bed, some sweat, especially in the face, with moderate heat; the second day. N.
 . Slight sweat, after the disappearance of the other symptoms. P.
 . Sweat, with aromatic odor. P. Urine aromatic. 140. L.
 300. Sweat while eating; while walking. P.
 . Sweat, with fear. P.
 . Itching sweat. P.
 . Exhalation from the skin less active than before, while a drachm was taken every day for six months. Hauff.

Skin.

- . Emaciates; the resin. Schröder.
 305. Purifies the blood, and is used in vulnerary potions. Tincture of the flowers. Schröder.
 . Itching on various parts, on the body and extremities, yielding rather an agreeable feeling on being scratched, but leaving a burning. J.
 . Itching in the palm of the right hand. N.
 . Itching on the glans. J.
 . * Slightly elevated, round surfaces, of a wart-like appearance, and of a circular form, varying in diameter from half an inch to an inch and a half; at places, running into each other; nearly covered both sides and the bottom of the sulcus ani, and caused much smarting and soreness of the part; with strong scented and highly colored urine. After previous use of Copaiva for chancre. J.
 310. * Ulcers (the same as from Myrrh). Tinct. benz., A.A.
 . * The oil is an excellent balsam for ulcers and wounds. Schröder.
 . * The liquor removes syphilitic spots and marks. Schröder.

Conditions.

- . The pressure of the clothes upon the abdomen annoys him. 110.
 Upon the chest. 198.
 . Pressure, as well as friction, diminishes the face-symptoms. 68.
 315. When walking, the ankles and tendines Achillis are painful.
 258, 259.
 . On turning in bed, or moving after sitting, pains in the body. 232.
 . On moving, the limbs crack. 273.
 . On bending to the side, pain in the chest. 201.
 . While sitting, pressure upon the vertex and the spinal column, 10;
 Palpitation of the heart, 214.

320. The head-symptoms are aggravated during rest, 25; toothache while lying down, 265; pain in the temples, requiring him to lie down, 18.

. On walking, pains in the eyes, 35; noises in the ears, 36; distress in the stomach, especially when ascending a height, 106; pain in the ankles, 258; perspiration, 300.

. In the open air, the eyes, 35; the ears, 36.

. On uncovering, in a draught of air, head-symptoms, 25; cold in the head, 48; cough, 182.

. External warmth relieves the face-symptoms, 68.

Times of Day.

325. Periodical pains in the head. 26. Cold in the head every day, 48.

. Awakes every morning, at 2 o'clock, with palpitation of the heart. 216, 217.

. On awaking in the morning, pains in the head, 25; excited, with sneezing and hoarseness, 183; coated tongue, 69; loss of appetite, nausea, 216; hacking cough, 181; sweat in bed, 297.

. In the forenoon: Pressure upon the vertex and the spinal column. 10. Urgency to urinate, and copious discharge. 140.

. At noon, he bites his under lip. 76.

. In the afternoon: Vertigo, 7; the gastric symptoms disappeared, 216.

330. In the evening: Symptoms of the nose, 56; increase of appetite, 190; thirst, 101; stitches in the anus, 121; discharge of flatus, 124; stitches in the chest, 203, 205; stitches in the arm, 235; itching of the palms of the hands, 241; pain in the fingers, 241; in the great toe, 265; sweat, 296.

. At night; sweat, 296. Sleep disturbed. 281, 285.

Sides of the Body.

. Right, then left, 34, 234, 235, 260, 265, 267.

. Left, then right, 249.

Left.

Temples, 17.

Itching of the ears, 39.

Irritation to sneeze, 44.

Ulcer at the soft commissure of the jaw, 74.

Lower ribs, 113, 114.

Right.

Itching of the eyes, 34.

Stitches in the ear, 38.

Toothache, 78, 79.

Pains in the liver, 111, 112.

Stitches in the chest, 202.

About the third rib, 200.

- Pain in the kidneys, 133. At the tenth dorsal vertebra, 225.
 Itching of the glans, 166. Arm, 234, 235, Fore arm, 236,
 Affections of the heart, 211, 217. 267.
 About the sixth rib, 201, be- Wrist, 307, Itching in palm of
 hind, 224. the hand, 241.
 Arm, 235. Finger, 241, 242.
 Hand, 234, Metacarpus, 239. Hip, 234, 247.
 Thumb, 267, Index finger, 245. Thigh, 249.
 Hip, 234, to the toe, 248, 249. Knee, 252, 267.
 Thigh, 248. Foot, 267, Ankle, 234, 249.
 Knee, 248, 249, 252, Calf, 249. Tendo Achillis, 260.
 Ankle, 234, 258, Tendo Achil- Great toe, 244, 261, 265.
 lis, 259, 260.
 Great toe, 265, Toes, 248, 249.

Thus the right upper and left lower predominate; the upper extremities are, to the lower, as one to two. Otherwise the two sides are alike, except the heart symptoms.

Other Remedies.

After drinking wine, 253.

Dr. Lingen, who obtained very striking and decided symptoms from this remedy, was also so sensitive to wine, that the smallest quantity produced pains in the kidneys and bladder.

Copaiva balsam. In Walker's case, 146, Soden 147. In the cases cured Balsam copaivæ was given at the same time; in almost all of the cases cured by Jeanes 148, 149, 150, 151, 276, 309, Balsam copaivæ had been previously given. I call attention to these facts in connection, because this and many other symptoms indicate a very great relationship between these remedies, without considering that copaivic acid $C_{40}H_{31}O_3NO$ belongs to the same group with Benzoic acid $C_{14}H_5O_3HO$, *i. e.*, it has the same difference of C and H (the latter nine less) and other properties.

The affinity of Benzoic acid to the metals is, in the liquid state, as follows: Zinc, Iron, Manganum, Cobalt, Nickel, Copper, Lead, Tin, Bismuth, Antimony, Arsenic, Quicksilver, Silver, Gold, and Platina. From this, I think, we may learn the proper succession of these remedies, *i. e.*, Zinc, Iron, etc., would follow better than Gold and Platina.

CLINICAL OBSERVATIONS.

The direction from right to left is characteristic, and it has this property in common with Colchicæe, and with many other remedies; the direction from above downward, is also very important. When both are found united in a remedy, it very often is one that will bring diseases from within, outward. Hence I look upon Benz. acid. as an antipsoric. I know very well that it is no longer the mode to speak of this, but I have my own good reasons for so doing. Instead of rejecting Hahnemann's distinction, with the usual shallowness, I have rather sought a scientific foundation, for what Hahnemann, as an artist, found in the way of experience. All the remedies which he called antipsoric, operate, not only far more continuously (than others), but, very decidedly, from within, outward. Hence, thereby, all diseases are either relieved or cured, and certainly brought into the best direction possible. Even the tubercles of Lepra, which form under the skin which sympathizes with them, and which is drawn inwardly by them, derive, from antipsoric remedies, a direction outward, and disappear, while itching vesicles appear on the surface.

Less, but next important, is the direction from above, downward, as every one must have experienced in all painful affections, as rheumatism and gout especially, where it always indicates improvement.

One needs only to compare Copper and Iron, and he will see why Hahnemann placed the former high up in the rank of antipsoric nobility, and not the second. The most remarkable of all, is Hahnemann's choice of vegetable substances. Led simply and solely by experience, and his complete mastery of the art of observation, he selected only twelve of the antipsorics from the vegetable kingdom. That he had no theoretical reasons for this, does not admit of the least doubt; but least of all, had he thought of the botanical families and groups of Jussieu and others. He had expressly stated in 1796, that it was not admissible to draw any conclusion from the natural relation of plants as to their effects, and, during the later years, he had no time to trouble himself with Botany. Thus, he very likely did not know much of the arrangement of plants into families and tribes. We may consider it an accident, but it would seem to be a very remarkable one, when we found, what is apparent to every one understanding Botany, that these twelve plants belong to as many different families, and to such as are, indeed, the most important of the

vegetable kingdom. On this point, more anon. Hahnemann discovered his remedies, as the old astronomers did the planets, by inquiry and observation; it is for us, like the modern astronomers, to discover planets there, where we are justified by conclusions to seek them.

The more Benzoic acid is used in gout, the more will it be prized. Attacks, in their first appearance, especially when they announce themselves by changes in the urine, can be terminated at once by its use, or, at least, be shortened, *i. e.*, quickly brought to their chemical end; especially since the so-called "latent gout," in many forms, can be cured with it. The influence of this acid upon the kidneys is not only, as is the case with many substances whose overplus must be removed by these organs, an external influence, as I might say, but is rather internal, affecting, as it does, the functions of the nerves which determine the activity of the kidneys. The smallest doses change the urine in so short a time, so decidedly and so strikingly, that we can find but very few remedies which approach it in this respect.

In gouty diathesis, the attention should be directed to Benzoic acid, particularly if the gout, as it is said, affects the heart. "It admits of no doubt," says Vogel, in his *Diagnostic Investigations*, I. 149, "that many of the so-called heart diseases, especially the angina pectoris, belong to this category. They disappear as soon as the gout presents itself; when continued and repeated organic defects arise. Among these we find, cardiac constrictions (stenoses); hence in all valvular defects, we should especially remember this remedy, in fact, in all affections of the heart. Of course, we can expect benefit only when the character of the case corresponds to the character of the remedy. Especially the time of day must correspond. If the disease has a direction from below upward, then, in the contrary direction, the remedy operates favorably in a far more striking and decided manner. I have also succeeded in cutting short an attack of gout, when it developed first on the left side, but threatened to pass to the right."*

This remedy affords relief only to those whose kidneys have a variable activity, and are inclined to take on pseudo-crises or natural palliation; where there is great receptivity of the system, and activity on the kidneys, of the bladder and of the urethra.

When Canstatt declares, (Klink IV. 74,) "a slight degree of valvular defect generally presents no perceptible morbid phenomena," he only announces, as everywhere else, that he did not know how to observe. On the contrary, I have met with but very few cases where accompa-

* All cases that are more or less benefited by Benzoic acid have the direction from left to right, and from below upwards; this being the opposite of the direction the symptoms assume with most provers. 1870.—C. HG.

nying indications did not at once appear. Cases, where it remained uncertain whether the insufficiency were really established, are not brought into the account; the cases where this was already determined, but not long before, teach, that so important a change, even in the slightest degree, announces itself by symptoms, especially and quite naturally, when it is something new in the system. Even children can express it exactly. Subsequently, as in all organic changes, the organism, as we say, becomes accustomed to it, *i. e.*, the disease is really worse; just as is the case when the spinal column is curved to one side, when, to preserve the equilibrium, another curve is formed on the other side, at a different point. The same also occurs in dietetic habits, in drug diseases; it is the so-called "curative effort of nature" which is imitated by the old school.

All organic diseases, especially of a noble organ, not only show themselves at once, and more clearly than at a later period, but they have also precursory indications. I will grant, that there are block-heads among our patients, who either know or observe nothing of their own bodies, or forget everything again. This, however, should not make us indolent, but rather the more active. At the same time, he who is too stupid to get well, must remain sick; for, as evil is its own punishment, so does stupidity avenge itself, and often more severely.

"For the powerless symptomatic Therapeia of valvular disease," says Canstatt, "it is quite a matter of indifference, whether one has to do with insufficiency or co-actation of the orifices, or, with the aortic, mitral or tricuspid valves, and in what way they may be affected," although, as is reasonable, he wishes Pathology to be held in honor, even when it brings no direct benefit.

Our "symptomatic therapeutics" in valvular diseases is not powerless. Organic changes may always be prevented, when the physician understands it and the patient is obedient. No case, threatening the occurrence of thickening of the valves, has ever occurred to me, which has not been cured, if the patients would but somewhat persevere, and this, under the peculiar disposition to be anxiously concerned about it, occurs much oftener, in such cases, than where diseases of the lungs are impending, where a peculiar indifference or hopefulness is characteristic. But even many cases where stenosis, quite unmistakable, has already produced enlargement of the heart, by dilatation or hypertrophy, have been permanently cured, especially in case of young girls; some of whom afterwards married and had several children without any relapse. In case of young men, also, notwithstanding that they afterwards married, and that all heart dis-

eases are soon aroused again by marriage if the least residue of the disease remain. During pregnancy, very much may yet be done in this regard, but, in that case, coitus must be discontinued entirely.

Most of such cures were effected with the higher potencies; the lower very often producing violent aggravations, without improvement. Benzoic acid, however, has worked well in the lower attenuations. *Kalmia latifolia*, also, according to recent reports. Lithium is probably indispensable in many cases.

Another question is, whether we shall only give the Benzoic acid when the "gouty diathesis" appears as a "causal momentum." I think that as long as the thing is uncertain, the decision may remain uncertain. If the symptoms correspond, then it helps, whether there is any reason to suspect gout or not; and if they do not, then it does not help, even not in genuine gout. Any one who looks over the sad list of so-called "latent gout," might wish that there were one specific remedy for all such cases. That would, however, only be a relapse into the barbarous clumsiness of the old school, with its *Colchicum*. Phosphate of ammonia, etc.

To physicians who are chiefly governed in their choice of a remedy by the name of the disease, it may be interesting to know that Benzoic acid corresponds to many forms of Schönlein's Urodialysis. They might otherwise think, perhaps, that we, who do not consider such matters as the main thing, and do not make a show of them, neglect them altogether. Stapf has, in all his ledgers,* given, in each case, the pathological name of the disease; these names had, however, no influence upon his choice of the drug. History has shown that those Homœopaths who cover symptoms,† do bring out again and again, something new and practical, but those who cover the names of the disease, very seldom; these latter prefer to travel on the old trodden way of their pathological books, and wonder at their very selves when they make any digression; for instance, if fewer scarlet fever patients die under Ammonia than previously under Belladonna.‡

Benzoic acid has not a very significant resemblance to the pathological symptoms of arthritis, but, in the characteristics of the various cases, we may find often the characteristics of the remedy, viz.: acidity

* Carefully kept for 40 years.—C. Hg.

† Being called slaters or shinglers by the opposition.—C. Hg.

‡ Dr. Schrön, in Hof. was astonished when he found, after he had lost many cases of scarlatina by giving each one Belladonna, "stronger and stronger" of course, that he did not lose as many after "changing his mind" for Carbonate of ammonia. Another year he went, very likely, through the same sad experience with the new specific.—C. Hg.

in the stomach, sour risings and vomitings; not only after the stomach is brought into sympathy, as Canstatt will have it; the attacks always commence therewith, as does the gout, but it is more noticeable subsequently; compare 92, 109. White fur on the tongue, 69, 70 (often bluish, in urodialysis. C. Hg., 71). Loss of appetite alternates with morbid hunger, 100, always increased thirst, 101. Ischias urinosa. periodical, at night, 248, 249, 251. Itching of the skin, 306, on the back, 229, on the hands, 241. Asthma urinosum, (174, 175, 176, 184, 187;) very painful ulcers, 309; adherent, swollen lids, everted; conjunctiva reddened; corroding tears, hinted at only, 31 to 35. Tongue swollen in spots, hard, red, dry, chapped, sore, 72 to 75.

The Balsams of Copaiva and Tolu are given with effect in Urodialysis, perhaps because the latter contains Benzoic acid, or something similar. Balsam of Peru occasions brown urine, perhaps in the same manner. Possibly Benzoic acid would sometimes be suitable in the Urodialysis of nursing children, at least, as a complement to Lycopodium, yet I should expect in this case, as well as chiefly in the Urodialyses, more from Benzoic acid. In Syphilis congenita often neither Mercury nor Sulphur nor Lycopodium avail anything; Benzoic acid may then be compared. The urine, characteristic of Benzoic acid often contains little uric acid, and has usually no sediment, but always decidedly more urea. It is, probably, the presence of the latter which gives the strong, unpleasant, but not ammoniacal odor, or, color and odoriferous matter go together, as in plants. After very small quantities of Benzoic acid, the urine is often changed in a few hours, and that, indeed, as regards both color and odor; whether and how far, it undergoes chemical changes also, the experiments, thus far instituted, have not decided.

For the above-mentioned changes in the urine, $\frac{1}{2}$, $\frac{1}{10}$, $\frac{1}{20}$ of a grain of the undiluted acid suffices, as has been established with the greatest certainty. If more is given, it is transformed, but *this transposition into Hippuric acid is not the cause of its effects*. With even greater certainty has it been shown in hundreds of cases that the higher attenuations (6-15) had a curative influence on the sick. In most cases, repetitions were necessary, and, in some cases, gradually higher and higher potencies were given, with great advantage. The high potencies, however, have not yet been tried, except in cutting short attacks of gout.

In this short example we find united the main constituents of a useful drug proving.

First, the historic portion; then, cases of cures. Finally the results of provings themselves, on several men, with various *quantities*, with traditional and minimal doses, and, an indispensable thing as a literary convenience, the denoting of each separate symptom with a number, by which reference thereto is easily made. Neither is regard had to single organic parts only, as it would comport with the one-sidedness of the physiological school to look upon it merely as an expectorant, according to the traditional acceptation, but the entire form of the mutual action of Benzoic acid with the organism, its parts, its affections, its intellect, etc., is made clear, together with a statement of the conditions according to time, place and circumstances, with the further addition of the affinity of the influence of other drugs; in short, all the lines of direction of the quality of Benzoic acid, together with clinical experiences.

Now the question comes up in the form of the second deductive operation: is Benzoic acid, according to this proving, useful in pneumonia, and if so, under what conditions?

The first question is answered in the affirmative, as regards the local effect of Benzoic acid, by the symptoms 173-209; but all the other symptoms of the whole proving determine, perfectly, only the *essential indication* of this quality; *i. e.*, those conditions under which, simply and solely, the Benzoic acid *may be* useful in pneumonia. Above all, symptoms 233-278 indicate gouty or rheumatic complaints, and 261 points to Podagra, and these symptoms mark the *specific individuality* of a patient, if Benzoic acid is to be indicated for him, in the most striking and manifest manner.

If this is present, then symptoms 189, 202, 204, 205, give the nearer local indications, and symptoms 206, 207 and 208, give further points of support from practical experience at the sick-bed. Further, the symptoms, 211-218, etc., come under consideration. In consequence of these effects of Benzoic acid upon parts of the organs of respiration, upon their nerves, etc., its efficacy in pneumonia may be thus deduced, as also the *kind of conditions* under which it may be simply and solely indicated; for the effects of Benzoic acid upon this organ are, *at the same time, accompanied by such circumstances* as indicate that it should only be given in such cases of pneumonia as concur with a so-called rheumatic or gouty state of the body. Hence, nothing is left but the confirmation of this conclusion, *which, in Homœopathy,*

need no longer to be sought first empirically in the form of the third deductive operation, as we shall see presently.

In consequence of this proving of Benzoic acid, however, this remedy can no longer be ranked among the expectorants, and, surely, the careful reader has already concluded that all such one-sided designations arise from deficient, false, unpractical observations. But the physiological school never proceeds in any other manner; it cannot dispense with such quackish models, because it does not follow a thorough therapeutic study, according to its own confessions. It cultivates physiology, and that is all; of therapeutics *it hopes* to be able to speak at the end of a century, or after an indefinite lapse of time. Hence it aims to promote narcosis, expectoration, relaxation, perspiration, and, in short, all the other “ations,” and “inflations,” of which that school is guilty, and, although it succeeds in carrying out its desire, once in a hundred cases, at the best, and then by mere accident, yet it does not feel disturbed, in the least, over its errors in the ninety-nine cases; it confesses that it knows nothing better, and that is enough. Hence follows, however, its *absolute incapability* to establish a differential diagnosis, in any case, between those phenomena which belong to the cause of the disease, and those which pertain to the remedy used, especially as soon as the latter exceeds its intended causal effect; *e. g.*, not merely produces perspiration, but beyond this, still other phenomena.

§. 213.

However, in the way marked out, it never *can* succeed in learning any better. For, if one of its experimenters ever makes an observation, he maintains the conclusion, founded thereupon, according to subjective convictions, intolerantly and firmly, because he is deeply penetrated with the belief and the subjective conviction, that the experiment, which he made, led him thereto, while the experiment in nowise serves for a confirmation of his *conclusion*. §. 79, etc. If another takes the notion to experiment after him, we may predict, with the greatest probability, that he will contradict the assertion of his predecessor, as we may see from §. 148, by a comparison of the previously given therapeutics of pneumonia, as well as from §. 150.

Such misfortunes never happen to Homœopathy, although even its drug-provings furnish *apparent contradictions*, as, for example, symptoms 134 and 135, or 126 and 129, or 219 and 220, of Benzoic acid. But, in Homœopathy, nothing is decided inconsiderately, regarding its being or not being; nothing, which is once observed

there, is disputed again in the very next moment or rejected, as if the observation were false; but, the results obtained simply stand, as *independent* facts, *per se*, till they have found an explanation according to natural laws. Any other criticism is not permitted. There no paltry subjective opinion can come up in order to prove one's being in the right, and it is well considered that every subjective *conclusion* or *opinion* is not only null, but far below it. Were it possible for any such to gain credit, as it is in the mania of tradition and authority of the physiological school, it would necessarily produce the greatest mischief. The proofs of this we meet in this school at every step.

As regards the proving of drugs, nobody desires to surpass the other, so far as concerns being in the right; however, every one does desire to do so in rendering valuable his acquisitions (results gained by the proving) according to well established rules, and thus we gain a very useful "credit," which is decidedly more profitable than a "debit."

The Law of Similarity.

I come now to speak, not so much of such errors in medical literature, which, for the most part, are *errors of observation*, (taking a fact for something else, instead of recognizing it for what it really is.) I shall speak rather of the errors of *not observing*.

Since perception is an infallible evidence of that which is really perceived, the *errors of not observing* can only be committed by taking that for a *perception* which is in reality only a *deduction*. §. 3.

These errors arise from the want of practice in the art of observation, from accidental or intentional carelessness; also from the lack of a thorough competency to form a *conclusion*, by which, chiefly, the opponents of Homœopathy distinguish themselves as the *passive slaves* of their preconceived opinions.

§. 214.

For the elucidation of the foregoing, I now pass over to the demands of No. 4 of §. 206, to the natural law which, rendering superfluous the third deductive operation, presents the indications of the remedies proved on the healthy as the leading maxim for the cure of the sick.

The school of which Hahnemann was the founder, lays claim to the *law of similarity*, which is its fundamental curative principle. But we never before had learned any law of similars in nature. Just as it is taught, it is to serve as a guide in our conduct at the bedside;

thereby, however, no law is expressed, but only an *empirical maxim*. But a *leading* maxim must be a law of nature.

Even the term "Similarity" presents, in and by itself, the greatest difficulties, when we seek to explain what we intend to express thereby. Diligent search has been made in Physiology, Pathology and Therapeutics after an exact definition of what "similar" is, but in vain, because "similar" is a relative idea, *lacking both a subject and predicate*, and one with which the most contradictory relations may be maintained.

On account of the unhappy generalization which has been attached to and retained in the empirical maxim of the "Simile," it became a common belief that we needed only to search for similars in every direction. The idea became current that the Homœopathic drugs, in their provings upon the healthy, had not only to show similar phenomena to those of the disease, if they were to be indicated; but on this very ground the idea was based, at the same time, that the action of a remedy also must be a similar action, *i. e.*, inducing movements similar to those of the morbid cause, if not approaching them exactly; and, in this very peculiar manner, the grounds of indication were identified with the manner of operation of substances as if the indication could also explain their operation, which is false according to the laws of nature, and, as an erroneous generalization, is not a whit behind that truly fabulous fallacy "*contraria contrariis*." Here, also, we find two unlike ideas identified, and we have examples enough in the Homœopathic literature, in which, according to circumstances, now one, now the other, were to be sustained. Such ideas war against all the laws of Therapeutics. Remedies can, on this earth, only introduce movements into the organism, which run counter to those induced by the morbid cause, at least which change them and this, clearly, cannot be brought about by the so-called similar movements.

In order to give a clear example of the deeply seated confusion which the misuse of the empty relative idea of *similarity* has caused, even in Homœopathy, to the extremest degree of unjustifiable assertions, I cite the triumphant words of a Homœopathic writer upon the effects of the springs, at Lippsspringe, which contain 83.25 per cent. of Nitrogen, in the free gases, and 4.40 per cent. in the combined.

As he found, after the use of these springs, about a *half less of urea* in the urine of the healthy, the uric acid being entirely wanting, while according to the laws of chemistry, as he thinks, it was to be expected that he would find in the urine, after the use of these springs, a quantity of urea far beyond the norm, consisting almost exclusively

of Nitrogen, because an abnormal quantity of Nitrogen had been incorporated into the body, by drinking thirty-six oz. of water so rich in Nitrogen—he comes to the conclusion: “*This fact, right palpably, shows how deceptive it is to draw medical conclusions from chemistry, regarding functional changes in living organisms, as is the case with the old school. Allopathically this fact can not be explained, but so much the better Homœopathically; in fact, it confirms the Homœopathic principle.*”

Although this specimen, as it is given here, unhappily found its way into two *text-books*, even of Homœopathy, as a *proof* of this fundamental principle of the simile, this proof is, nevertheless, *false*, and the Homœopathic *explanation* appears an utter failure; and this for the reason, probably, that, for some writers, Homœopathy (which, for other people, needs explanation itself,) is, *a priori*, the ultimate reason of everything; because, for the *confirmation* of the Homœopathic fundamental curative principle, this fact lacks a very important item, viz.: *one patient*, at least, who has sickened from other causes, under a decreased excretion of urea, with total suppression of the excretion of uric acid, and then found cure by the use of the Lippspringe water.

But, again: Homœopathy is of no avail to us for an *explanation* of this fact, but *simply and solely* the chemistry here unrighteously put to scorn, which teaches us that urea and uric acid are *products of oxidation* of organic substances by Oxygen; that, further, Nitrogen offers the greatest resistance to the influence of Oxygen upon the structures of the organism; hence, by increased absorption of Nitrogen into the organism, those products of oxidation *can no longer be produced* in the previous quantity. From this simple reason, these springs diminish the production, and, consequently, as it is clear enough, the excretion of urea and uric acid.

Thus, as the fact is given, it contains the exact negation of the Homœopathic fundamental principle of the simile, and only a confirmation of the contrarium of Allopathy.

This is, indeed, only *my* explanation, but it is, at least, an explanation of this fact, *founded upon a natural law*, with which fact Nature has set a trap for those lacking in scientific education. To be authorized to reproach chemistry with insufficiency, requires something more than an unswerving faith in the Homœopathic fundamental principle.

Before any one can speak of the confirmation of a fact, he ought to know that it can only be attained in the form of the third deductive operation; before a man, finally, is disposed to give an explanation of a

fact, he should know, that, in matters of natural science, the explanation of a fact is possible only by the laws of nature.

Finally, the whole experiment with the Lippspringe springs, is by no means to be considered as completed according to the laws of art, or conclusive for the aims of that writer.

Every such new arbitrary opinion, every new unjustified assertion, surely fabricates a new nail for the coffin of Homœopathy, which is, according to the ideas of Allopathy, already made.

Now, if Homœopathy has, as yet, no clear conception as regards the definition of the similar, one might think that the law of the simile is itself only an empty notion. But I can help him to surmount this difficulty. For this purpose, we must remember that every therapeia, for the purpose of designating events, which it does not know how to explain, but which, nevertheless, present themselves at the bedside every day, borrows ideas from its elementary sciences, in order to adjust those facts to them, according to a subjective view, thus making those ideas, as much as possible, subserve its own purposes. Thus it happens, also, with Homœopathy. It has borrowed from mathematics the idea of similarity, without, however, retaining what mathematics understands thereby. In mathematics, "simile" means that which *agrees in form*, in opposition to "æquale," whereby the *agreement, according to the essence, and, hence, according to the cause*, is expressed. Now, in the idea "form," I have a subject, and in the idea "agreeing," a predicate for it; thus, a proposition, and no longer an empty idea of relation, as regards the idea of similarity. Hence, the substance of this law of similarity, consists in this, that it indicates a correspondence in form, which, for the purpose of a cure, must be present *between* the form of the reciprocal action of the organism *with some morbid matter, and that form* of the reciprocal action of the organism which is induced by its connection with *another substance, artificially introduced from the external world*, under which conditions, simply and solely, the indicated remedy will be found. Thus the use of coffee produces, according to the external form, similar symptoms to those produced by brandy, and we know that they mutually counteract the injurious effects of the immoderate use of each other. Thus, if, in general, from the drug-provings with Aconite, a specific form of reciprocal action with the organism presents itself, which corresponds, for instance, with the form of disease, measles; then the indication is thereby given, according to which, Aconite must be given in that form of measles, provided it is desired to attain a cure; this is contrary to the indications of the physiological school, which so little

desires a correspondence of form between the reciprocal action of a remedy and that of the morbid substance, that it would rather fear to increase the disease in hand by such operations, and thus betakes itself to a course *diametrically opposite*. To give a familiar illustration, the physiological school, where it has to do with elevation of temperature, always seeks *directly* to lower it; if with a case of diarrhœa, to check it; in the first instance, by refrigerant means of all sorts; in the latter, by substances like Opium, Acetate of lead, etc., of which it is empirically known, that they *locally* paralyze the peristaltic motions of the intestinal canal. Homœopathy, on the contrary, would, in the first case, give substances, of which it has learned, from physiological drug-provings, that they produced, in the first case, elevation of temperature, and in the second, diarrhœa, and the only remaining question would be, that of quantity. The doings of the physiological school, on the contrary, leave many intermediate terms unconsidered. No doubt, refrigerants lower the temperature in fever, but this removes only one of the *manifold* results of the morbid cause, and a movement is checked, which the organism needs for the expulsion of causes foreign to it, and inducing in it disease. In the second case, the diarrhœa is, indeed, checked, but in this case, too, not to the benefit of the spontaneous counter-action of the organism directed against the cause of the disease; for now, the substances which should be dejected, are retained within the intestinal canal, and produce other mischief; so that, under such a medication, no end could be seen, if the powers of the organism, in consequence of such new and repeated requisitions made upon it, according to the ever newly occurring morbid phenomena, did not finally become exhausted, and thus warn the curing artist to abstain from his attacks; should this happen, the organism, freed from its most powerful enemy, might again find opportunity to regenerate itself spontaneously, according to its own laws.

§. 215.

The more *correspondence* between the symptoms obtained by drug-provings and those of the disease in hand, the greater is the certainty with which a curative result *can be announced beforehand*; for the one question, whether a substance can be a curative means, in a given case, is answered simply and solely by the *previously* made experience, that this substance really has, upon those parts which are diseased, a *nutritive or functional* influence; the other question relates to this: in what *degree*, to what *extent*, and under what *circumstances*, is this

possible? This really can only be answered by the drug-provings upon the healthy. Hence, it is only *all* the symptoms of a drug-proving *together*, which perfectly determine the essential indication for its use, in case of similar symptoms of any disease whatever.

Hence, in Homœopathy, diagnosis and indication go hand in hand, upon one and the same path. For this, its point of departure, is no longer the *accidental* picture of the disease in hand, but the necessary, ever-recurring object, hence, an object to be determined *a priori*, from the results of its (Homœopathic) drug-provings; for it possesses, what the physiological school utterly lacks, a *perceptible similarity* of two relations, from causes utterly unlike. Homœopathy, consequently, possesses not merely *descriptions of spontaneous diseases*, but, for an exhaustive and correct judgment thereupon, it possesses, also, the counterpart of similar effects from quite other causes. Now, experiment and observation at the bed-side had again confirmed, without exception, that, with drug-provings, from given causes and conditions, a constant course of pathological occurrences takes place, as well as in the course of spontaneous diseases. Since, now, in this manner, forms of events, according to natural laws, are given, and, in fact, radical cures are always attained by those remedies, the results of whose provings upon the healthy were similar to the phenomena observed in the sick, Hahnemann abstracted from these facts the law according to the form, "*similia similibus curantur*," and designated this form as the law of similarity.

Consequently, if the law of cure were found, it would be superfluous to seek the deductive confirmation, *ex post*, for every single case; for the unfailing realization of this expectation stands now according to natural law, hence *a priori*, confirmed, once for all, before our consciousness.

We know, for example, if an intermittent fever begins with a chill or thirst, followed, sooner or later, by heat, with much thirst and no sweat, or sweat at a later hour, whereupon all the earlier ailments are increased, liver and spleen are swollen, and even dropsical symptoms present themselves, that Arsenic is the specific remedy, because it, and it only, can produce similar symptoms in the healthy. In this we draw much less venturesome conclusions than chemistry, when, according to its well known classification of series, it presupposes the existence of bodies as yet entirely unknown to it, and determines, in advance, the place which these bodies must take, but nevertheless confessing that the How of the chemical existence is entirely concealed from its view.

On the contrary, if to Homœopathy, the How of the action of its

remedies is never wholly concealed, and the Why of the cure is a natural law—would Homœopathy be less justifiable in drawing conclusions *a priori* from the ground of objective facts than chemistry?

Hence, we *know* under what causes and conditions, in general and in particular, every cure not only is possible, simply and solely, but also necessarily occurs, and consequently we are no more subjected to the *intellectual* contingency. From the similarity of the two above mentioned relations, from the similarity of the remedy-forms with the disease-forms, hence always arises the only possible Diagnosis, Indication and Prognosis.

The law of similarity can also be explained from well known pathological experiments. The similarity between the diseases and the results of drug-provings, firstly, were not to be thought of, if it were not that a pathological minus, as well as a pathological plus of substances for nutrition and function of *similar* parts of the organism, are also accompanied by similar groups of symptoms, hence corresponding in form; and, for the second, were it not a fact that every pathological change of nutrition- or *function-motions of similar* parts of the organism, produced by various causes, by its external phenomena, always points to the same anatomical localities.

Hence the therapeutics of Homœopathy does not rest upon a one-sided empiricism, upon authority or tradition, as that of the physiological school, but upon a comparison brought into connection with the law of similarity, consequently upon a synthetic comparison between *objective facts* brought to face each other. The whole success, at the sick-bed, of curable cases, depends thus no longer upon empirical inductions, but upon rational inductions in an *objective* sense, and it (the success,) should hence always follow, did not the *subjective* views of the individual powers of comprehension of the physicians sometimes err; an exception which should by no means be flung in the face of Homœopathy as a science, as it only pertains to the insight of the physician, which, however, when well exercised, becomes certain enough; for the conviction of the *practiced physician* is, in that case, no longer founded upon probabilities, conjectures and opinions, but upon *knowledge*. (Compare das hom. Aehnlichkeitsgesetz, offenes Sendschreiben an Liebig, bei Purfürst in Leipzig.)

As regards No. 3, in §. 206, I recall, first of all, the example in §. 35, in order to complete it here.

When the element of decomposition of Ileo-typhus is taken up by the means of transportation of the circulation, by the blood of several men, we do not observe, by any means, the same phenomena of disease in every case; in many, *none at all*.

According to the law of the similarity of action and counteraction, no body can change another without thereby suffering *itself* partial or total changes; and so, indeed, the element of decomposition introduced may be again destroyed; for, as soon as it became changed, which may happen sooner or later by the counter actions of the organism, it is brought by these, according to a law of nature, (and, as it has been demonstrated, by experiment and observation,) to its destruction, and is cast out. But the changes which it has once introduced into the blood, extend themselves, under certain circumstances, according to the law of reciprocal action, through the well known stages of the fever in specific directions, and may finally reproduce the same typhus ferment.

It is true that we do not know this typhus ferment exactly, but the *law of similarity* teaches us to recognize, among others, Phos. ac. as a curative means, in one of the forms of Ileo-typhus.

Although, now, according to the law of similarity, the cure of the corresponding forms of typhus can be foretold *a priori*, yet is it useful to inquire, in what manner the course of such a cure can occur in a *material* respect.

Dr. Böcker has experimentally demonstrated that Phosphoric acid, taken *in small doses*, soon enters the blood and very clearly operates to decrease the excretion of Potash, while, at the same time, more of the acid *remains* in the system than when it is exhibited in a larger dose. §. 78.

The phosphate of Potash, in which combination PO_5 mostly presents itself in the organism, is also, though a constituent of *all* animal fluids and tissues, found in the blood, and chiefly in the blood-cells.

Let it be further considered that all tissue-forming substances retain phosphate of Potash with the greatest obstinacy; that all nutritious fluids contain phosphate of Potash, and we may well conclude that it is indispensable for the formation of the tissues.

We know also that the oxidation processes, the change of gases in the respiration, and other chemical transpositions in the blood, as well

as the saponifying of the fat, and its further oxidation is brought about by the presence of the alkalies, and chiefly by the presence of the phosphate of Potash. Finally, in a solution of phosphate of Potash, the nerves retain their vital properties for a long time, and very completely.

Consequently, it is very apparent, that, *by the diminution* of the excretion of phosphate of Potash in the urine, *as is wont to occur after the use of small doses of Phosphoric acid, conditions* are produced, within the organism, which may present many-sided resistance to the typhus decomposing element, as well as to the extension of the typhus process.

§. 217.

Thus, while the PO_5 introduced into the organism, as a remedy in typhus, may produce material *counteractions* against the influence of the typhus ferment, it was used, as one might think, exactly in accordance with the maxim of the physiological school “*contraria contrariis curantur.*”

This is true enough according to its *effect upon the sick*, but not according to the indication, and the fundamental principle of Homœopathy relates only to the effects of the remedy upon the healthy, in comparison to the effects of the morbid cause, in order to establish the *indication*.

Now, when I seek remedies for the reformation or cure of a diseased organism, according to the law of similarity, *i. e.*, according to “*similia similibus curantur,*” and determine which are necessary for the accomplishment of these ends, I then conclude, from the drug provings, hence from the effects of a drug already known, to *the organism*, as to *the cause necessary hereto*.

This is, however, exactly the converse of the causal succession which can only conclude from *the cause to its effect*, and this conversion can only take place by calling upon a law, and here, the *law of similarity*, which again can only be obtained from the art of experiment and observation, but must be already established *a priori*. But this law of nature has clearly nothing to do with the material conditions which are produced within the diseased organism, in consequence of the remedy administered according to its indication.

The law of similarity, then, refers only to the indication, and the effect which follows thereupon must, just as naturally, be a *contrarium*.

Not only as regards its *contrarium* for the indication, but also in

relation to Pathology itself, we must charge the physiological school with great errors.

Physiological medicine possesses, for every disease, a *general* description, as was shown, for example, in case of Pneumonia, in Part I.

But, with *every special* case, a form of pneumonia, differing from all others, is presented, which, during its course, the physiological school can observe in a *fragmentary* manner only; while the *entire compass of the case, from its very development onward, as well as the laws of the dependence of this variety upon the coöperating forces of nature, remain hidden from this school.* These laws must also control all the varieties of the course, age, exudations, complications, etc., known to the physiological school.

In nature, everything is arranged according to measure, number and weight. The physiological school always measures, counts and weighs the *various special products*, without being able to fathom the Why of these products, and their very numerous varieties, because, for this end *two things* are required: 1. The measure of the magnitudes which are given empirically by observation. 2. The *coincidence* of these magnitudes contained in a given case, with *others* already known from drug-provings.

The physiological school, on the contrary, measures objects always *by themselves* only; for example, the pulse, the respiration in any disease, and decides thereby, it is true, regarding the diseased condition, in distinction from the healthy, but not regarding the diseased condition from imponderable and often unknown causes, in comparison with a similar condition, produced artificially, from known causes, by the drug-provings.

Hence, it lacks the most important token of a correct judgment of a *pathological condition*; it lacks the visible *comparison* of a form corresponding thereto. The physiological school has always neglected to investigate into anything but those phenomena by which we perceive, merely, what exists in Nature; thus it has also neglected in Pathology, to proceed according to the very first rule of experiment and observation, viz.: to *change the circumstances which may cause and accompany a spontaneous sickening*; indeed, it would not know, at all, how that was to be managed, and still more, it does not feel the necessity, even, of possessing such a method of comparison as is offered in Homœopathic drug-proving.

Truly we can measure, in any thunder-storm, the power of the light of the lightning, and the distance of the thunder; but without an electrical machine, with which we can produce a similar natural phe-

nomenon, we should never have been led to the causes and conditions of the thunder and lightning.

As long as it was not known, for instance, what thunder and lightning were, all sorts of means were sought to prevent the stroke of lightning. It was attempted by the lighting of consecrated tapers, by the ringing of bells, by the firing of cannon. Still the lightning struck, for no one could form a correct conclusion concerning the nature of thunder and lightning, or the connection of cause and effect thereof.

But when the electrical machine was discovered, which produced phenomena similar to thunder and lightning, then we had, at once, an *analogon*, as a measure for comparison, at hand, which taught us what really happens in thunder and lightning; and instead of putting candles upon our tables, we put lightning-rods upon our roofs.

In order to obtain the same means for the understanding of diseases, as Physics obtained for the understanding of thunder and lightning, Homœopathy again selected the way of experiment as the only exact one; its adherents took various substances of the outer world, especially (such as were) known of old, as so-called drugs, that they might experience in reality what the result would be. These drug-provings taught now, that every drug, however it might have been considered before as diaphoretic, anti-inflammatory, narcotic, etc., produced a complete disease, always peculiar to itself, *i. e.*, specific. Then there appeared the most varied fevers, inflammations, paralyses, forms of typhus, all these, nothing but general affections of the organism, which were perfectly similar to all those which we see arise from other epidemic and like causes. Then we had a number of artificially produced forms of disease to *compare* with those spontaneously produced, as Physics had the electrical machine to compare with the lightning, and thus the blind attempts to destroy single symptoms could be abandoned.

§. 218.

Thus, in the same manner, by means of *artificial* interferences with drug-provings, we produce diseases, in order rightly to judge of the significance of *spontaneous* diseases; by the proving of the same substances in various places, ages, sexes, and at different times, we must *change the circumstances* under which the phenomena may be produced, to harmonize them, as regards form, with the phenomena of spontaneous diseases, in order thoroughly to understand all the *con-*

ditions under which these events may arise. Only then we possess these other magnitudes in order to measure their coincidence with those found in spontaneous diseases.

From these comparisons in Homœopathy, the law of similarity has inductively proceeded, and even *the circumstances* have been found which may accompany every special disease, in order to establish a correct diagnosis, indication and prognosis.

Just because nothing can be measured by itself, Homœopathy produced, by its drug-provings, an artificially constructed new pathology, in opposition to the old, and that, not from the phenomena discovered in those who became spontaneously sick, or, in their dead bodies, but from results obtained by its drug-provings. Hence these are the substance, not only of its general, but also of its special, pathology and therapeutics; they are instruments of comparison, which the physiological school utterly lacks. If these results may not as yet be looked upon as complete, yet they admit of far more striking results at the bed-side than the physiological school (naturally enough) can even comprehend, and thus the *principle* is firmly established, according to which, in every respect, the most precious acquisitions of therapeutics are every day more and more increased.

It is true, as said before, that lately, some of the adherents of the physiological school have undertaken drug-provings, after the pattern of Homœopathy, (unhappily, not according to the principle just discussed, in order to find a Therapeutics according to the law of reciprocal action, but,) according to old customs, to find means to proceed against the morbid products *immediately* and *locally*.

The sources of this maxim, utterly false for all Therapeutics, at the best to be used here and there for palliation, are found in pathological anatomy. The insight into the pathological processes, overthrew the therapeutic illusions of the physiological school-wisdom, begat scepticism, and this, in its turn, do-nothingism, which, at least taught it that many cures occurred much better spontaneously, than under its erroneous therapeutic assaults. But to seek a new maxim for therapeutics, after the old had been recognized as hurtful, was nevertheless neglected, and the medical activity of this haughty school was still persistently directed to the dissecting room. Upon pathological anatomy all its knowledge was concentrated, and, realizing its therapeutic impotence, it plumed itself upon the most trifling discoveries in the dissecting room, which, for therapeutics, were utterly void of interest. The chemico-physical and technical diagnostics had, indeed, led to a discovery not to be undervalued, to-wit: the so-called inhalation therapy. It can, however, naturally possess no greater

value than the latest acquisition, derived also from mistaken views of therapy, the sub-cutaneous injection in neuralgias. The gain therefrom is purely palliative in all cases which do not get well of themselves; the injury, however, which has already been inflicted by these two processes is much more considerable.

And how could it be possible for a local therapy to fill an essential indication? So long as no regard can be paid to the entire constitution, which can only be done according to the doctrine of Homœopathy, so long we have palliative means, but no therapeutics; for we can never draw from the *products* of disease, especially from such as are seen in the cadaver, a rational conclusion regarding a remedy, by which all of these products might have been prevented and could be removed; for the product is silent as regards the causes and conditions of its origin, and teaches us merely whither the same may lead. The physiological school thus clearly occupies a stand-point which may be compared with that of the vine-dresser, who, in order to prevent and cure the grape disease, instead of seeking to improve the soil, attempts to treat the grapes themselves.

All this is the work of the guild artificially created. Formerly, only those men were called to the chair of therapeutics whose practice, for a long series of years, had shown itself successful; now, only the assistants of those teachers occupy the chair of the teacher, who themselves were advanced from the post of assistants to that of master, and thus the prevailing professorial guild is formed, which has no longer anything to do with success in treating the sick, but only with the propagation of what was imbibed in their youth.

§. 219.

How now do these opponents look upon the Homœopathic law of similarity?

In the Medicinische Klinik, a Journal of the physiological school, 18, 1857, I read, with admiration, the following query, which a physician, deeply depressed by the progress of Homœopathy, as regards its uninterrupted increase in favor with the public, thus lays before us: "Can any one, tormented with violent thirst, quell and appease the same with the 30th potency of herring-brine? Homœopathy must answer in the affirmative to be consistent; for a large Allopathic dose of herring-brine, taken by the mouth into the stomach, produces, as experiment teaches, intense thirst. Is the principle, *simile similibus*, practical or unpractical? Has science, have patients, gained anything

by it? I do not pretend to answer, but humbly beg for news about the herring-brine." Did I not say, in §. 217, etc., that these very wise gentlemen did not yet know that they lived in a fallacy with their *contrarium contrariis*; how should they ever be able to attain to a critical opinion about Homœopathy?! That is not even the import of the law of the Homœopathic general posology, so-called. A symptom like thirst suffices the physiological school for a point of attack, under the device *contraria contrariis*. The most striking proof of the lack of that Homœopathic differential diagnosis, which is indispensably necessary for the indication of a remedy, could not be better expressed. The *indicatio symptomatica* which refers only to single symptoms, and the *indicatio causalis*, are the palladium of this Therapeia. It has, indeed, an inkling of an essential indication; it feels a longing for it, without knowing the means wherewith to gratify it. Its indication is an empiric one, it possesses neither an abstracted nor a demonstrative law, which could offer the proof of any of its results. Thirst and something to quiet the thirst; thereupon rests its whole undertaking. But it cannot comprehend with what this thirst *is accompanied*, in order to know to what quality it owes its origin, and to measure what quality and quantity of some substance, the whole form of the disease, with which the thirst occurs, requires, in order to cure every thing which accompanies the thirst, as well as the thirst itself. It appears even to consider a *dietetic* thirst the same with that which accompanies fever, and the more one critically examines its treatment, the more errors and sources of errors does one find in its knowledge; for, otherwise, the question would have been put, has herring-brine been physiologically proved or not? because Homœopathy, according to its fundamental principles, uses no remedies but those physiologically proved, in order to be able to determine their indication, as above said, according to natural laws. If the herring-brine has not yet been proved, then there is no rational answer to that question, and the question is itself, for that reason, a strategem, §. 164. But there are proved remedies enough which, in a large dose, produce thirst, and will, in the 30th potency, assuage it, as Arsenic, for example. But not *the same* thirst which Arsenic causes, in large doses, can be assuaged by the 30th; such a desire is not thought of in the "*simile similibus*," but it lies rather in the nonsense "*æquale aequalibus*," and on this ground, as well as on several others, the question is an unbecoming one, so that it is not worth the trouble to answer it in such a way as it deserves. It does not fail, however, to give us a new idea of the prevailing ignorance regarding that which it calls Homœopathy. The good man can give the answer himself, as soon as he has proved

the brine on himself and others, according to the laws of the art of observation and experiment, and then has used it according to the *simile similibus* in the above detailed significance of the synthetic comparison. But to prove any thing upon himself, that is not so pleasant, and it is far easier to prate about it than to do it.

So the corporate sensitiveness of our adversaries relieves itself by nothing but cold streaks of lightning, since they always have before their eyes only their limited knowledge, as if it were the charming goblin Lilith, who seems to every one like his beloved, from whom he can not separate. They live in their own world, and seek, only in this narrow circle, recognition, approbation, and rest. It is the rest of the grave for scientific progress, which envies the progress of Homœopathy. But envy is always a sign of want. Is it, then, any wonder if absurdities are sharpened into epigrams, and simple truths are darkened into riddles?

But if we only follow up the conditions from which such one-sided opinions spring, grow, flourish and propagate themselves, like indestructible weeds, then their sturdy life will cease to surprise us.

If we ask, for instance, what forms of opinion surround us, not only in our youth, but through the whole course of our lives, we find whole classes given up to dogma, others again to speculation and scepticism, not only in all their aims and ends, but subjective tendencies must educate us even. Hereby these forms of opinion become a habit with our intellectual powers, and whatever seems to militate against them we can not understand.

The legal profession, for instance, is surely and radically a learned profession. It is clearly convinced, among other things, that it shall be the aim of criminal law to prevent the repetition of crime. But, in reply to the question, how this is to be done, the answers are very various, since one seeks the wrong in the result, in the act, another in the near and remote conditions of the reciprocal action of the individual with the outer world.

Now the first would claim the right of retribution, the other would wish to have the wrong-doer treated as a patient.

According to the law of effect it may be useful, in many cases, to punish the wickedness of men in their sensual motives alone, and thereby mete out retribution. But whether, by this, a change of their principles is brought about, can not be determined beforehand; for bodily punishment acts only upon *the feelings which are capable of no reasonable judgment*. On the contrary, in the majority of cases, it will be far more useful not to disregard the power of

the intellect, and, according to the law of reciprocal action, to *allow* an evil education to be followed by a better.

Hence, the first treatment can never be anything but a palliative, or, for an uncertain length of time, a prophylactic, consequently, a police-measure, an uncertain help; the latter, however, an essential, consequently, just treatment; and this is the whole difference between Allopathy and Homœopathy.

If one asks now, what is just? no one gives us an answer. But every one knows what is wrong — just the same relation of forms of opinion as above between the idea of health and sickness. §. 46. Law is not a principle; on the contrary, it is a product of the necessities of the time, like the style of architecture; hence, the oftener the law books are revised, so much better would it be, and a positive law one will seek in vain. Very recently, among those learned in the law, a course has been adopted, in order to discover the idea of law, or the principle of justice, similar to that of physiological medicine, to find a rational therapeia, as they hope, by the study of the various provincial laws, to arrive at that principle; thus, from the result, to come at the cause.

Only an imperfect induction would thus be gained, however, and hence, would never bring us near our aim; never lead to a principle or a law.

This source of error, just as we notice it in the physiological school, has no other resource but probable conclusions, together with the custom forced upon it, as we have already said, by the lack of essential reasons, to weigh the reason, *pro* and *con*, of a committed crime, in order thus to determine on which side the preponderance lies.

Herefrom, again, nothing but conclusions from imperfect inductions can arise, which admit also of exceptions.

And thus the law of *causality* remains the nearest at hand, the soonest settled, hence the most approved and the most injurious to our mental association.

Hence, can any one blame the majority of physicians if they even are unable to comprehend the difference between causality and commerce in nature, and thus not the laws of nature possessed by Homœopathic therapeutics? If not, then one must also be indulgent to the inquirer about the herring-brine, with his failing judgment and his Weltschmerz.

THE HOMŒOPATHIC DOSE.

We must, to change the circumstances, *experiment* also, in drug provings according to Homœopathic principles, with the same substances as morbid causes, *in various quantities*, and herewith we come again upon the arena of ignorance, upon the strife about the dose. The discovery of the proper dose for every occasion is not possible in the traditional mean of quantity; drugs must rather be proved and learned from this mean, up to their maximum of intoxication, and thence back again to the minimum, in order to possess the whole extent and substance of the quality of a drug, and the law of its *reciprocal action* with the organism, because no drug can be used, as such, according to the law of quantitative causality, provided the object is not mere palliation. I refer here to what has been said in general, in §. 119-123, inclusive, regarding the dose.

It is thus demonstrated that, in therapy, we should not indulge in strife over the quantity of the dose, for the quantity of a substance alone cannot raise it to the position of a drug, but this, in connection with its *quality*; because, according to natural law, the quality of a substance remains the same in each one of its quantities, and only with the quantity set free from its combined state, does it change *its intensity in its mutual relation to the organism*. Whatever attacks, then, we make upon the organism for its good, *we must always, at the same time, endeavor* to gain the most favorable and surest ends with *the least injurious, and, hence, smallest possible dose*; a question which truly could not yet be brought up by the physiological school, since it possesses no therapy conforming to natural law, and, indeed, not even conceptions according to natural law.

To answer this, experiment and observation are again necessary, as they also must be interrogated in this direction even; for, after the objection from the mouth of Virchow, "It is quite preposterous to believe that a small quantity of any particular substance can produce more effect than a large quantity of the same substance," Homœopathy must feel it to be a matter of importance to set this objection in its true light, though it betrays an incredible lack of knowledge of natural law. Such an objection could arise only from a chemical view, for, to chemistry, it is all the same whether it has a cubic inch of chalk, for instance, in hand, or a minimum thereof; because, as soon as it can no longer *weigh* the chalk, its science has ceased, and the *qualities* of a cubic inch, or of a smaller part, in its relation to the organism, are

no subjects for its experiments. In therapeutics, no question regarding the influence of a body upon the organism is answered by indicating its quantity. In therapeutics there are only bodies, which, by virtue of their quality, and then only by virtue of their quantity, are to be judged regarding their influence upon the organism, because the capability of action of any body here never depends upon its cubic or ponderable substance, but only upon its surface. It is a matter of indifference what quantity of iron I make red hot, even were it many hundred weight, whose quality of heaviness might crush me; it could burn me, on coming near to it, only so far as it could touch me with its surface. The therapeutic indication of the physiological school can be expressed with perfect clearness, as follows: Its conviction is, that the influence of a drug is to be judged *according to its cubic proportions*, and its weight, not according to its *surface*; otherwise, that assertion about the preposterous belief that more effect is to be expected from a smaller quantity than from a larger of the same substance, cannot be defended. But our aim, as physicians, is not to deal with the human organism as we do with substances in a chemical laboratory, nor are diseases to be wiped out like an ink-spot.

The physiological school is so committed to chemical views, that all recollection of the physical and chemical forces of various imponderable quantities has quite forsaken it.

§. 221.

In the year 1857, on occasion of the 98th anniversary of the Royal Academy of Sciences, at Munich, Jolly communicated some valuable experiments, for the purpose of judging these chemical and physical qualities and their varied intensity, according to their quantities; these experiments were valuable, also, as confirming the previous paragraphs, and as giving an exact insight into the relations of the qualities and quantities of substances. He set himself to discover the effects which depend upon the activity of the molecular forces, but are measurable, and permit one to draw a conclusion upon the magnitude of forces, and, where it is possible, upon those magnitudes undergoing change, according to the relative distance of the points operating upon each other. If he did not entirely succeed in the solution of this problem, that which is done, for therapeutical purposes, more than suffices; a reward which, at any rate, in and for itself, offers indemnity enough, since those labors will ever remain distinguished in the annals

of Therapeutics, in connection with his name, *for the benefit of mankind*. And what reward could be greater?

The first object of his investigations was solutions of Saltpetre, (1) "a solution containing 12.0113 per cent. at $^{\circ}\text{C}$, was, by addition of distilled water at $^{\circ}\text{C}$, successively diluted. It was observed, (2) that if, to 1.000 cubic centimetres of a solution free of air, 1257.8 cubic centimetres of water, free of air, were added, a *contraction* of 21.26 cubic centimetres took place." This is very considerable, Professor Jolly proceeds, and may be as accurately determined, as, with the scales, the centigrammes of weight can be determined. That *contraction* is the total expression for the condensation occurring, and amounted to $\frac{940}{100000}$ of the original volume. An error appears to have slipped

in here, as at the * further on, in the use of the figures $\frac{94}{100000}$, which are incorrect, at least according to my reckoning; but this, however, for the question under consideration, is of no great importance.

"The force requisite to this, and which clearly is the expression of *the effect of the molecules of the solution upon those of the water*, may be judged by the compressibility of the water and by that of the solution. A pressure of one atmosphere produces a diminution in the volume of water of $\frac{51}{1000000}$; in order to produce a decrease of volume

of $\frac{940}{100000}$, the pressure of * 184 atmospheres would be requisite. In the original it stands 18.4.

"(3) If to the already diluted solution, 4327.6 cub. cent. of distilled water were added, then a *further contraction* of 15 cub. cent. takes place. And, finally (4), if other 24311.6 cub. cent. of water were added, the *newly occurring contraction* amounts to 13 cub. cent. more."

We now obtain the co-efficients of contraction of these solutions, if we divide the contraction which results every time by the then present volume; thus:

$$\frac{21.26}{2257.8} = \frac{940}{100000}; \quad \frac{15}{6585.4} = \frac{228}{100000}; \quad \frac{13}{30897} = \frac{42}{100000}.$$

The pressure which was necessary to produce the contractions by which these attenuations were brought about, we obtain, expressed in atmospheric pressure, when we thus divide each co-efficient of

contraction by the pressure of one atmosphere $= \frac{51}{1000000}$; $\frac{940}{100000} \div \frac{51}{1000000} = 184$; $\frac{228}{100000} \div \frac{51}{1000000} = 44.7$; and $\frac{24}{100000} \div \frac{51}{1000000} = 8.0$.

To make these vast effects of these dilutions more apparent, we need but remind the reader, that the column of quicksilver in the barometer, under the pressure of a single atmosphere, stands at 27.428 inches: and remind him, moreover, of the resisting force of water against outward pressure, of which Pouillet, among others, states: if we pour water into the bore of a cannon, whose walls are three inches thick, and apply strong pressure, the gun will burst before we have reduced the water to $\frac{19}{20}$ of its volume.

Since, now, the co-efficients of contraction do not decrease in proportion to the increase of volume of the solutions, it is thereby made clear that an *arithmetical calculation* of the attenuations, as regards their efficiency, contains a *false maxim*, although both Hahnemann and his opponents have made such calculations.

§. 222.

When I began the study of Homœopathy, the rock of the attenuation question, on which so many of our adversaries' heads have suffered shipwreck, was, to me, never an objection worthy of consideration.

I read the arithmetical calculation of Hahnemann, according to which the first centesimal attenuation of Aconite, for instance, contained the $\frac{1}{100}$ part of the tincture of Aconite, the second, the $\frac{1}{10000}$, the third, the $\frac{1}{1000000}$, the sixth, a billionth, the thirtieth, a decillionth, etc. This view I considered, *a priori*, as defective, for what has the law of quantity to do with the laws of relation, under which laws the Homœopathic attenuations must also stand? The laws touching the proportion between matter and vehicle interested me the less, because I had, first of all, to discover, by experiment and observation, the laws of relation subsisting between these Homœopathic attenuations and my own organism. Hence I proved on myself one of the most powerful substances, Arsenic, and began with its thirtieth decimal attenuation, putting, for the sake of convenience, twenty drops into half a pint of water, of which I took, four times a day, a table-spoonful.

On the second day, I observed, not having an unsound spot in me, nothing but an unusual thirst, which, however, I attributed to my bodily exertions, the weather being, at the time, very warm; but, at the close of the third day, this peculiar sensation of heat in the mouth rose to such a pitch that I was obliged to drink water the whole evening, uninterruptedly, without being able in the least to allay the thirst.

As this irresistible longing frequently disturbed my sleep at night also, and continued undiminished next morning, I was obliged, for the want of any other cause, to ascribe it to the influence of the Arsenic, and I terminated the proving. This thirst did not disappear till the end of two days.

After eight weeks, I proved upon myself, the *tenth decimal attenuation* of Arsenic, in the same manner. On the second day even, I felt weary and averse to all bodily effort. This weariness increasing, on the third night I hardly slept at all, and, on the fourth night, I could not close my eyes, without being able to discover any other reason for it than the effect of the Arsenic. On the following day there was added to this the tormenting precursor of the arsenic thirst already well known to me, and I was convinced enough that these phenomena could only be ascribed to the influence of the Arsenic.

Twelve weeks later, having taken the *third decimal attenuation* of Arsenic, as above, I felt, on the very first day, a rumbling in the bowels, to which, on the second day, were added severe pains in the bowels, with diarrhœa and inclination to vomit, which induced me to close this proving also. A year later I made the same experiments with several attenuations of Arsenic, and, as regards these three, with the same results, and then proceeded to prove upon myself Aconite, Belladonna," etc.

These experiments and observations had driven from me, forever, all doubts about the efficacy of Homœopathic attenuations. I gave myself no further trouble about the well known arithmetical descriptions of these attenuations, which were sufficient to frighten so many away.

I then received Jolly's Monograph, by which I obtained leading principles, which enabled me to compare the results of my provings of Arsenic just mentioned, with those results which were said to appear from provings according to the arithmetical calculation, taking for this purpose the quantity of vehicle which Jolly had used in his experiments.

I filled a marble vessel with *thirty quarts* of distilled water, thus with about the same quantity which Jolly used, in his fourth attenua-

tion of his twelve per cent. solution of Saltpetre. To these thirty quarts of distilled water, I added ten drops of the Homœopathic *mother tincture* of Arsenic. After stirring this about with a glass rod, I filled several bottles with this attenuation, in order to preserve it.

I now began, as before, with twenty drops from one of these bottles, which I dropped into half a pint of water, and of which I took a table-spoonful four times a day. Not till I had continued this proving for six days, did I think I perceived some effect, which quite resembled the thirst in consequence of the *thirtieth Homœopathic attenuation*. This thirst, however, increased very slowly, and I was generally in good humor and vigorous. This lasted only two days longer, then the thirst increased, and that sense of vigor gave place to a certain sense of discomfort. After a considerable time, I again put twenty drops into half a pint of water, from a solution of ten drops of the mother tincture of Arsenic, corresponding with Prof. Jolly's third attenuation of Saltpetre, and thus in about $6\frac{1}{2}$ quarts of water.

In like manner, on taking four tablespoonfuls every day, I experienced, from this dilution, an effect similar to that of the *10th Homœopathic attenuation*, but in a much more feeble degree, and not till after four days, with some cutting pains in the bowels, and incipient sleeplessness.

Finally, with a dilution of ten drops of the *mother tincture of Arsenic*, in two and a half quarts of water, corresponding to Jolly's *second dilution*, I experienced the effects of the *third Homœopathic attenuation*, but, likewise, later.

Aconite, proved in like manner, refused its effect much earlier. Even from 10 drops of the mother tincture of Aconite, in six and a half quarts of water, I observed no effect upon the organism.

After such results, I had a rule by which to measure Homœopathic attenuations, which, at the same time, proved to me that the arithmetical symbols of these attenuations contained colossal transgressions of facts.

If we inquire about the modality; if we inquire why an attenuation with thirty quarts of water, which, according to calculation, about corresponds to the third Homœopathic attenuation, yet produced upon my organism the effect of the 30th only, the answer is derived simply from the various conditions which were presented to the activities of the molecules of Arsenic upon the molecules of water in the various distances; for at one time the molecules were confined in the small attenuating vials, the other time expanded in the marble vessel.

Thus, if we divide the same amount of molecules, of the smallest particles of a body (which are clearly not its atoms, but only com-

plexes thereof), once in the 30 quarts of water, then in 30 vials, each holding a cubic inch, it is clear that these molecules, in the first case, are more inactive and inefficient in proportion *as the vehicle occupies more space*, till, finally, they subdivide into their atoms. For, in such proportions, the power of resistance against the surrounding medium diminishes in the same degree as the force of attraction of the vehicle must likewise increase with the increase of its volume, as the experiments of Jolly have proved.

The force of attraction of things unlike and the repulsion of the like are, however, in the Homœopathic attenuations, comprised in a small space of only a few ounces of the vehicle, so that, indeed, *a priori*, they can be effective much further yet than the thirtieth attenuation. Hence the *quality* of the Homœopathic attenuations must likewise be an entirely different thing from the attenuations according to the arithmetical calculation, as my experiments and observations have also shown.

Moreover, the quantity of a substance in *Homœopathic* attenuations must necessarily *decrease* only *relatively*, *i. e.*, not *constantly*. Even with the naked eye, one may see, on preparing the first trituration of Carb. veg., for instance, that the masses become darker the longer they are triturated, and that, indeed, in the same proportion, as, during the trituration, more and more of the particles of the coal are separated from each other.

But, in the same degree in which the bodies may be, in their molecular condition, closer together or more widely separate, in the same degree, also, must they show their effects, and this they must do, indeed, within the organism, according to the conditions presented by it, and in different ways.

Hence, in view of these investigations also, the arithmetical measure, for judging of the efficiency of Homœopathic attenuations, is not the proper one.

In order to show how much, by experiment, *calculations* are very often thrust back into the limits of their doubtful significance, I present the following example for those who set calculations above all other facts:

The resistance to the bullet, which it experiences from the counter pressure of the atmosphere, is calculated, for the conically pointed ball, at twenty-five, but practically it is fifty-two; the resistance which the semi-elliptical ball experiences is calculated at fifty, but practically it is forty-three; the resistance against the ogivale ball is calculated to be forty, but practically is only thirty-nine; thus less than that of the pointed cone.

Hence, it is settled that even the efficiency of Homœopathic attenuations is *not* to be determined by calculation, but by *actual* effect upon the organism.

Again, if it be further considered that the third Homœopathic attenuation always develops a function which is nearly equal to the pressure of eight atmospheres, and that the parts of these attenuations are always similar in quality to the whole, then these developments of force refer, not only to the entire volume of these solutions, but also to every separate drop thereof, and thus it is, also, in this direction decided, that the *inefficiency* of these attenuations upon the human organism can no longer be affirmed.

§. 223.

But what are we to understand by a *solution*? Chemistry discriminates between *mixture* and *solution*. According to Chemistry, a mixture is every thing which consists of unlike parts lying in apposition, as, *e. g.*, Granite consists of Quartz, Mica and Feldspar. But bodies are termed by it solutions, which consist of unlike substances, so united that nothing unlike is any longer present, and that, consequently, the previously unlike parts have been mutually interpenetrated into a homogeneous whole. But who has ever seen such interpenetration; and, if no one, where is the *natural law*, according to which such an idea of a solution could be possible? Indeed, such a mutual interpenetration of heterogeneous substances, is, according to the eternal law of nature, *viz.*, the constancy of masses and the forces of matter, a simple *impossibility*. But if this law of nature is a truth, then, like all other laws abstracted from nature, it can have no exceptions, and must be capable of confirmation by all facts. But where is such a fact found, with such a confirmation in Chemistry? Nowhere!

But, on the contrary, I have just cited facts from Professor Jolly, one of our most celebrated Physicists, which not only confirm again the truth of that law of nature, but which, forever, render even the idea of solution quite doubtful, since he observed that even in a solution, which is nearly the same as the third Homœopathic attenuation, the molecules of the Saltpetre still possess such a power of attraction for the molecules of the water, *that these, together, produce a force of contraction equal to the pressure of eight atmospheres*. Those molecules of the twelve per cent. solution of Saltpetre had thus, by observing their functions, clearly indicated their presence, even in 24.311 cubic centimetres of water, and hence could not form, with the mole-

cules of the water, any homogeneous whole. Their solution has, hence, always remained a *mixture*, and the idea of solution is, therefore, utterly false, because all facts controvert it.

Chemistry has not as yet considered such processes, as it generally occupies itself but little with the establishment of logical ideas; but how, if I may ask, would it then explain its separations, which it is accustomed to attempt with its so-called solutions of all kinds, if their mingled properties possessed that homogeneity which they ascribe to them? The idea of solution, together with that of their homogeneity, finds no practical application to the world of bodies: here, only, the idea of specification avails, according to the law of the constancy of force and mass of matter.

It is somewhat different, if it is asserted that, in a transparent solution, which at no point refracts a ray of light, and no longer forms a deposit, the molecules of the constituents of the solution are carried so far from their *combined*, into a *free* state, that every molecule may develop its specific fundamental forces alone and by itself in contact with others; for then it is clear that all molecules take to themselves definite quantities from others, which quantities may be separated again from them by contact with others; and, in this condition of molecular mobility and freedom, even metals, and especially bodies which the chemist calls insoluble, may be *suspended* in fluids by the peculiar art of the Homœopathic triturations. Hence, by Homœopathic attenuations, we have only to understand suspensions. The *chemical* idea of a *solution* runs into its opposite, as soon as it is known that nothing is meant thereby but the overcoming of the cohesion by affinity, consequently a *union*. Physics would meet with no doubt here: Chemistry, nevertheless, will consider this incomprehensible, and in this case I can point it, not only to mineral springs, but also to the experiment upon the living organism, which would infallibly, as it is usually expressed, place before its eyes, if it could only think half-way physiologically even, the *reactions* of the same against such triturations, and their so-called solutions, in the clearest manner.

In any controversy it is quite advisable to permit the opponent to speak first, and I now take the liberty of alleging, from my own observations, concerning Jolly's experiments, that I not only found them confirmed, but, at the same time, also, B, compare §. 221, found that the molecular contraction in such experiments manifested itself all the more clearly, the more affinity the substances used for experiment had for water; C, that in the same proportion, when preparing such attenuations, at first more or less heat was developed as the co-efficient of the repulsion, and, then, the contraction ensued as the co-efficient of the attraction; that the contraction, whether occurring with more or less power, is still dependent upon the specific weight of the body to be attenuated, which I especially mention for this reason, because the so-called Homœopathic drugs are chiefly suspensions in alcohol, and it has already been empirically settled, in the practice of this system, that its remedies, suspended in *larger* quantities of *water*, act more efficiently than in smaller quantities, as, for instance, if the prescribed remedy is first given in a glass of water, a teaspoonful to be taken at a time, instead of the same quantity of the remedy to be taken at once in a spoonful of water; a fact which heretofore could not be explained, but which now, too, is seen to be founded upon a law of nature; E, that, from these three last momenta, it must be concluded that various substances may indicate various co-efficients of contraction in more thorough investigations; consequently, we may conclude from them, also, as to the peculiar progressions of the *decrease* in the capacity of contraction. It may, hence, be analytically calculated, from some of the first attenuations, in what further proportion the capacity for contraction decreases in each separate substance, and, at what degree of attenuation the same, according to this mode of inquiry, finally *becomes null*, for this belongs to the completeness of knowledge regarding the extent of the qualitative power of action and the law of the specific nature of each separate substance.

As a proof of, A, §. 221, and showing that even to the physiological school such views are not quite strange, I quote from the Prager Viertel-Jahrschrift, 1857, how Bell, an adherent of this school in England, considers the exhibition of drugs, and, *especially of metals, in very attenuated forms, to be the most appropriate method*, and, for this conviction, offers the following facts. Absorption regulates itself chiefly *according to the organic need*, hence inorganic substances are taken into the organism in only very small quantities. Of this, Iron

offers the best illustration. The natural Chalybeate springs are the most efficacious in chlorotic-anæmic conditions, and yet the strongest of these contains hardly a grain in sixteen ounces of water. The same holds good with regard to Tartar emetic. In order to bring the inflamed capillaries into contact with it, no nauseating doses are needful. Bell has attained the same favorable result with doses of from $\frac{1}{16}$ to $\frac{1}{24}$ of a grain. With such experiences, how can we explain the unexampled obstinacy of our colleagues against the doses of Homœopathy, an obstinacy which is so great, that even the reasons brought forward for its reality will leave no impression. At least, the law of mental association, mentioned in the beginning, especially in case of old men, permits the conclusion that the impression made for many years upon their brains, leaves no room for the reception of new impressions to crowd out those which are present.

Prominent among these superannuated impressions, stand the errors of calculation and extravagant theories of which Hahnemann's time was guilty. By Jolly's experiment, *Hahnemann's decillionths and all such calculations fall to the ground, for, by way of example, from those 1000 cubic centimetres of solution of Saltpetre, by the addition of 1257 cubic centimetres of water, we do not get the sum of 2257 cubic centimetres, but some 21 less, that is, only 2236 cub. cent.; thus a considerable minus in comparison to the entire volume present before the attenuation is produced, and this continues, since every new attenuation produces, by molecular contraction, a new minus of the volumes present before their preparation.* That these differences form no constant series, comes from the leading principle under which these experiments were made. It included the problem, to deduce the law, according to which the decrease of molecular attraction coincides with increase of distance between the molecules, for which those quantities were chosen; and it was thus established that the molecular attraction really does *decrease* with that increase of distance. This suffices for our aim, to show that the calculations of Hahnemann and his contemporaries are to be laid aside in the realm of fables, with the same confidence, as those results gained by our opponents, by the aid of such examples of addition, as Schlegel, for example, who, in 1853, imagined with all seriousness that he had dealt a telling blow at Hahnemann, with such calculations. But who can blame Homœopathy in the case when, to many human intellects it seems incomprehensible; or if, without any reason, it is, moreover, unjustly accused of incorrect quantities.

Yet it is easier to infatuate than to instruct; easier not to be willing to understand, than to come at the bottom of a fact; and this is just

what the opponents of Homœopathy design, when they incessantly re-exhibit the errors of the childhood of this system.

§. 225.

Physical science is engaged to-day in investigations of the molecular forces. It will discover their laws in the laboratory, as little as did chemistry, to which these laws were first revealed in plants; for the molecule is living, and causes the transition from inorganic to organic nature. But only in Homœopathic practice were these laws known long ago.

With the discovery of the spectrum analysis, a new means is offered for verifying the existence of the material contents of Homœopathic attenuations. By itself alone, it would maintain the fact of these contents, but could not explain the relation of imponderable substances to the human organism, hence, this relation not being demonstrated, it would remain as imperfect as the mathematical calculation of the French Academy of Sciences. In the mean time, it is worth while to state, in opposition to this calculation, the fact, that any one may be rationally convinced, by the experiments of Ozanam, of the physical presence of medicinal substance in the first eight dilutions.

In the 64th Vol. of the *Allgemeine Homöopathische Zeitung*, March 24, 1862, we are indebted to Dr. Meyer, of Leipzig, who has distinguished himself by the scientific and prudent management of that journal, for the setting forth of such results of the spectrum analysis and the quotation of the following words of Dr. Ozanam: "This revolution in the analytical methods lends to the infinitely small quantities a significance not recognized to the present day, and will probably exercise a beneficial influence upon the many heads full of prejudice, and perhaps make them more inclined to consider and to study the therapeutic doctrine of the small doses, with less repugnance and less passion. And, in fact, Hahnemann, by his discovery of the efficiency of small doses, has anticipated Bunsen's discovery, or even foretold it. Truly, he raised medicine to the level of the other natural sciences, since he created for it a method which is analogous to the infinitesimal calculus of mathematics—the doctrine of the atoms and molecules of chemistry—the Aether theory of Physics, the cellular doctrine and the microscopical studies of physiology and pathological anatomy. And this new *Organon* has by no means remained as a speculation in his brain. No, he made it of practical value, and cured his patients with doses, the presence and value of which, exact science has only just

begun to perceive and acknowledge, now half a century after that man of genius."

§. 226.

In a work translated by Dr. Heinrich Böhnke-Reich, (published in Jena, by Otto Deistung, 1863,) entitled, "On the infinitely small doses of the Homœopathsists," and which claims a certain De Hemptinne as author, we learn that the latter received a commission *from the French Academy of Sciences, to demonstrate by numbers the impossibility of the existence of healing properties of the drops and pellets of the Homœopathic drugs, administered with so great assumption.*

Now, from these idle calculations, it is announced, that in the 30th Homœopathic attenuation, a milligramme of Aconite, for example, is distributed in a quantity of alcohol, which is nine hundred and twenty-five octillion times the volume of the earth, etc.; but this had already been told us by other arithmeticians of the same stamp.

With these arithmetical argumentations, the Academy of Sciences, in France, has radically disgraced itself, as I will show beyond a cavil, by a single quotation from the works of a German thinker, Prof. Conrad Herrmann:

"The mere *correctness* of a thought is generally considered a sufficient means for the establishment of the (asserted) *truth* thereof, or the proposition generally holds good, that that which has been *deduced* from well-founded premisses in a manner logically correct, or without internal contradiction, must, on that account, necessarily be true. In *reality*, however, a particular and essential limitation circumscribes this proposition; for the *correctness* of a thought is, in all those cases in which the same is not established upon a *firm empirical basis*, only then to be considered as a satisfactory assurance of a truth, when another general property is associated therewith, namely: that of *completeness*, or of entire exhaustion of all justifiable and, upon the whole, possible thought touching a certain idea."

The whole error, that the mere *correctness* of a thought, as such, necessitates *also its truth*, is a disease which *has extended itself into the latest periods* from scholasticism through Spinozism, which transferred the mathematical method, in its naked form, upon the material of philosophy.

Zeno, of the Eleatic school, concluded from the infinite divisibility of space to the impossibility of motion: a space which is to be traversed by any body is divided, first of all, into two halves, of which the one

must necessarily be traversed earlier than the other; but, now, since the same holds good concerning that first half, and so on forever, since even the smallest portion of space is subject to a further subdivision, and since even the smallest portion of space must always be traversed before the next beyond it, thus all motion, from the stand-point of a pure intellectual operation, is impossible, and so far Zeno was perfectly right to say: the fleeting arrow stands still.

Here thus we have a train of thought which is entirely *correct* in itself, but which, nevertheless, is *untrue*, since motion does exist in spite of it all.

But a refutation of Zeno's argumentation is perfectly impossible, since, on one side, its premiss, the infinite divisibility of space, is incontrovertibly established, as is also the deduction made therefrom. However, this whole train of thought of Zeno is *incorrect*, notwithstanding, in so far as it lacks *completeness*, even though correct in itself; for the very idea, on which all depends here, that of space, includes within itself, aside from the property of infinite divisibility, that also of the constant or continually occurring cohesion of all its infinite parts. Were space, in fact, a mere juxtaposition of its parts, then, according to the argumentation of Zeno, motion would be impossible; but motion is made clear by this, that the connection of these parts is, at the same time, constant or continual.

Every erroneous train of thought is either such as rests upon the *exclusive* presence of the *property of correctness*, or such as rests upon the *exclusive* presence of *completeness*. That comprehensive way of thinking which is correct without being complete, is *sophistic*, but that which, though complete, yet lacks the inner correctness in the connection of its members, is *confused*.

The *truth* of a train of reasoning rests upon the agreement of its members with the external *material* objects of which it treats; its *accuracy* upon the internal or formal agreement of its individual members with each other; its *completeness*, upon the fact that it exhaustively embraces every element contained in the subject of the proposition.

This whole exposition contains the above announced postulates of the art of experiment and observation; the truth rests upon rational induction, upon experience by experiment and observation; *the correctness upon the abstraction of the particular from the general; the completeness upon the inquiry regarding the subject according to the categories of quantity, quality, relation and modality. To meet all these postulates of a rational process, the French Academy of Sciences utterly failed, with the single exception of the mere cor-*

rectness of the calculation which was offered; hence it degenerates *into mere sophistry*.

Now, I very much lament the necessity of putting the impress of untruth and incompleteness upon the brow of such a body.

In incomprehensible blindness of an adulterous association of ideas, for it had appropriated to itself the truth of the conclusions from the calculations of De Hemptinne, this Academy mistook the difference between numbers and ideas, and overlooked the fact that the conception of quality is far more concrete than the quite abstract and purely spiritual conception of quantity. Herein they place themselves upon the antiquated stand-point of those who hold it to be impossible that there should be antipodes, because it presents great difficulties to the prevailing association of ideas, to conceive of people whose heads are in the same direction as our feet. Hence their mistaken principle, to wish to let figures speak, where we do not have to deal merely with a relation of super or sub-ordination, but also with a manifold co-ordination. Losing sight of the domain of the real in its concrete qualitative precision, it surrenders its whole thought and experimenting to *calculating*, as if, in this question, it could deny the ground of immediate experience.

That can only be explained by an *intentional* endeavor to mutilate facts, for where is the measure of the *necessary counterpart to the completeness of their opinions?* §. 215.

To attain this, this very wise Academy of Sciences ought at least to have entered upon a similar calculation regarding the quantities, in which the various substances of our organism, or at least some of them, are found in some parts of the same.

To characterize this sin of omission, I will add yet the calculation adopted by this learned Society, that the quantity of alcohol, necessary for the preparation of the ninth attenuation, forms a cube of one quarter of a league; that for the preparation of the twelfth, a cube of twenty-five leagues, etc.

Now, according to §. 28, a blood-cell contains a 0.000000000000-4746594816 part of Chloride of calcium, thus 22 decimal places, like that of the 11th Homœopathic *attenuation*, according to the arithmetical calculation, for the preparation of which, according to the same example, a cube of 1.7 leagues of alcohol or water would have been necessary.

If we assume that these blood corpuscles live 35 days, which is certainly beyond the mark, and in any case fully up to the extremest limit of possibility, then we would, according to this calculation within this space of time, have to take, within ourselves, this whole

quantity of alcohol or water, in order to have furnished the blood corpuscle its part of Chloride of lime from our food. One may see that the absurdity in which this Academy of Sciences loses itself, assumes monstrous proportions.

If, now, Homœopathy, with the eleventh of its attenuations, understands how to accomplish just as much as Nature, in her household, then, also, in this relation, nothing is more significant than that the opponents of Homœopathy reproach it with those very results in which it throws the physiological school the most in the shade.

Or is the French Academy of Sciences so little versed in natural sciences, that it does not yet know what wonderful means Nature uses in order to build up the greatest, by means of the smallest only?

From all which has been adduced in the foregoing paragraphs, the one-sidedness of the calculation and its utter worthlessness, without a simultaneous appeal to experiment, is fully shown.

This French Academy of Sciences may hence, once for all, be told that these calculations are without value. It should, before it expresses such opinions, resort, first, to experiment, and prove such Homœopathic attenuations on its fellows, even; for instance, those of Arsenic, by which means it might come before the public with rational observations and correct opinions.

§. 227.

In order to lead the fearful notions of the adversaries of Homœopathic attenuations into another dilemma, I adduce the exact experiments of Dr. Pröll, of Gastein, which were made in presence of Karl Reissacher, the geologist and superintendent of mines, and from which the following results were obtained, which I quote *verbatim*.

“Since skeptics call the Thermal Springs at Gastein distilled water, both fluids have been compared with each other before the tribunal of the electrometer, by which the great difference between them has been discovered, as well as the fact that only the condensed vapor of the Gastein springs was like distilled water.”

In order to learn whether the conduction of electricity loses *anything*, and *how much*, by being mixed or attenuated with distilled water, spring water (from the Fürstenquelle) was mixed with distilled water in an increasing and decreasing arithmetical progression; thus 90 cub. cent. of spring water with 10 cub. cent. of distilled water, etc., and finally 10 cub. cent. of spring water with 90 cub. cent. of distilled water. From this was obtained the interesting result, that the more

distilled water was used or the higher the *attenuation* was carried, the more acute was the first angle of deviation, *i. e.*, there was less electricity conducted, or the first shock was less severe; but that the *constant* angle of deviation, or the energy and intensity of the conduction of the electricity, remained nearly equal under all degrees of mixture; only very slight differences presented themselves, and, with the greatest attenuation, differed only about $\frac{5}{10}$ from the least attenuation; and even spring water, drawn five years before, gave the same angle of deviation as that drawn an hour before, *i. e.*, that drawn a quarter of an hour before and cooled to the same degree, 14.50 R. (F. 64.62).

Hence, we may again conclude, what may be really maintained, even in this respect, regarding the Homœopathic dilutions.

§. 228.

Finally, I must consider, in brief, the art and manner of preparing the Homœopathic drugs. The molecular bodies of vegetable substances are best preserved in equal proportions of the juice of the plant and alcohol, the plants themselves having been gathered at particular seasons of the year, in their *natural habitats*. If one wishes to set them free from this aggregate *condition*, ten drops of this tincture should be taken and put into ninety drops of alcohol, by which the first so-called decimal attenuation is prepared. With thirty vials, each one of which contains about ninety drops of alcohol, the thirty attenuations are prepared in the same way, by taking ten drops from the preceding vial and adding it to the succeeding, and continuing in this manner. Thus all substances soluble in alcohol are treated. Substances, which, though finely divided according to chemical notions, yet throw down a deposit in alcohol, and are neither soluble, as we are wont to call it, in water nor in alcohol, as Iron, Copper, Gold, etc., throw down no visible deposit with their fourth trituration. They must, however, be previously examined with great care as to their chemical purity. We then add to a grain of Iron, for example, finely divided upon a whetstone, ninety-nine grains of sugar of milk, and triturate the Iron with this medium for a long time, as a quarter of an hour, or even longer, if it is desirable to have it more finely divided. Then the same process is continued with a grain of the first trituration, which makes the second, and so on. By this means, an infinite increase in surfaces is gained for these substances, which, as is well known, can be the only parts which have effect upon other bodies, so that, for example, the third trituration of *Carbo vegetabilis* is still of

an evident gray color. That the sugar of milk, which has been used as the medium of the triturations, may the sooner dissolve, we fill a vial half full of distilled water, in making the fourth attenuation from the trituration, and add the other half in alcohol, after the sugar of milk has dissolved.

Hahnemann's rule, it is true, was to attenuate with one drop always instead of ten, but in doing so we are making too great strides, for The 1st of Hahnemann's Potency corresponds to the 2nd dec. atten.

2nd	"	"	"	"	4th	"
3rd	"	"	"	"	6th	"
4th	"	"	"	"	8th	" etc.

Thus we should lose the effects of the 1st, 3rd, 5th, 7th decimal potency. The first three triturations, on the other hand, are better made, as it seems to me, in the way prescribed by Hahnemann, because, with regard to decimal triturations, we are not able to keep in a state of suspension, one as low as the third. Thus Hahnemann made centesimal attenuations: others, decimal. The cypher, which stands next to the remedy, indicates the degree of attenuation. In order to learn more particularly the preparation of Homœopathic remedies, I refer to the works on Pharmacology, by Drs. Buckner, Caspari, Gruner, etc.; they can be only referred to here, for extracts from them would be impracticable.

A few ounces of these attenuations, then, form the great ocean which the opponents of Hahnemann thought they could make out, and that, in accordance with his mistaken calculations too; having shown themselves unable to correct this mistake, they have shown that they were capable of falling into an error with him. What more has been said upon this point belongs likewise to the fables, but Hahnemann was right again when he declares, that he observed that, after each violent shaking, the efficacy of these attenuations not infrequently was increased, because, by this mechanical influence, the molecules which had, after long standing, sunk to the bottom, may again be suspended, and molecular bodies, cohering together, may be again separated. What he maintained concerning potentizing by attenuation, refers only to the setting free of the molecular bodies thus accomplished. That he expressed himself therein somewhat inaccurately, Homœopathy has even to this day bitterly to atone for, since it is easier to notice a mistake than to correct it. But the reason of his mistake, and the separation of the idea of the quantity of the drug from that of its quality and relation, necessary for detecting it, this highly learned physiological school has not as yet succeeded in learning; hence has, in judgment, not advanced a hair's breadth beyond

Hahnemann, in his time, half a century ago. If it complains of this, it complains about itself. Had Hahnemann, or one of his surviving disciples, only affirmed that he had found vegetable substances in the spinal marrow of man, because they had a blue reaction with Iodine, then *a blessing would have rested* upon all who called themselves Homœopathists! Although the assertion of Stilling, that these bodies having a blue re-action with Iodine were cadaverous products, could not be maintained, yet it has been shown by Schmidt that they are animal and not vegetable; not non-nitrogenous, but nitrogenous formations, and this finally might have been concluded with the same certainty from the law of specification, had Virchow been acquainted therewith. Carbo-hydrates are found, indeed, in the human organism, in Sugar of Milk, for example, and Grape-sugar, but only as constituent *substances*; as *vegetable forms*, *a priori*, never. But because this famous discovery originated with a Coryphæus of the physiological school, and was sounded forth, *ex-cathedra*, all the world listened with unction to his words.

When Liebig found that common salt does not become suitable to act as a function-remedy till attenuated in fifty times its weight in water, while a concentrated solution is unsuitable for this purpose, then he, in fact, *potentized* the efficiency of common salt—just as Hahnemann did. The Homœopathic attenuations and *potencies* are thus borne out after all, as unchangeable facts according to laws of nature, and their designation is chosen with perfect propriety.

On the other hand, the great Hahnemann and his disciples, how are they followed with the bitterest invectives, and how are the most atrocious persecutions continued, to this day, against a science which, in every direction, is based upon natural laws! But a truth never entertains fears, it succeeds finally, and the earth moves after all, to the infallible injury of those opponents, of which history will always speak.

§. 229.

In Germany, the seats of the sciences, the Universities, are those institutions which not only distinguish themselves by perfect ignorance of Homœopathy, but oppose it, nevertheless, with hands and feet, it being impossible to talk of heads, under prevailing circumstances.

As proof hereof, I quote again a person who is distinguished as the most prominent scientific authority in Germany, because he loves to keep silence in the face of proofs, which might bring his scientific character into no slight question.

In the recent (the fourth) edition of the Chemical Letters, by Baron Liebig, we read, at the end of the fourth letter of Vol. I., the following:

“Who can maintain that the majority of educated and well informed men of our time, have reached a higher degree of knowledge of nature and its forces, than the Iatro-chemists of the sixteenth century, when he knows that hundreds of physicians, who have been educated at our Universities, maintain principles *which bid defiance to all experience and common sense*; men who believe that the effects of drugs lie in certain powers or qualities, which are put in motion and increased by trituration and shaking, and can be transferred to inert substances; who think that *a law of nature, which has no exception, is untrue as regards drugs, while they assume that their efficacy is increased by their attenuation and their decrease in effective substance?* Truly, one would be led to conclude that medicine, which has for its object the knowledge of nature and its forces, had taken the lowest place as an *inductive science*.”

Are there then no phenomena in nature which show that smaller quantities of the same substance produce more effect than greater? This question Liebig should have first asked himself, and sought to answer it, before he, as a natural philosopher, ventured to oppose Homœopathy. He might have found examples enough; indeed they have been expounded by his very own self. Is this not the most undeniable proof that Liebig, in his inconsiderate opposition to Homœopathy, meant only to maintain a far spread false opinion, and nowise cared for objective facts? Is such an undertaking worthy of a natural philosopher?

At the first glance, it is evident that Liebig is, as yet, so little acquainted with the laws of nature, that he thinks that the effect and counter-effect of matter, within our organism, is merely an affair of the various relations of *quantity*; regarding the qualities, relations and modalities inseparable from the quantities, which, in such conclusions, are to be considered quite as much as the quantities themselves; to think of these, and bring them into his calculation, he has, as his opposition to Homœopathy demonstrates, either never learned, or forgotten again, or kept in silence about, for the sake of an unscrupulous eristic strategem. Neither the one nor the other is becoming to a natural philosopher, and naturally very much degrades him in the high opinion in which he is generally held by all men of science.

Nothing is easier than to refute Liebig upon his own domain, that of chemistry.

When, for instance, Liebig undertakes an analysis of atmospheric air, and wishes to determine its proportion of Carbonic acid and water,

he uses the aspirator, and the various glass tubes required for this experiment, part of which are filled with small bits of glass, moistened with concentrated Sulphuric acid, and part with moist hydrate of Lime. By the change of weight which the substances in these tubes, in consequence of these experiments, undergo, he now learns how much Carbonic acid and water the air in question contains, by a simple calculation.

But, it is also known to him, that the question is only apparently solved, for he must now still consider the *relations* which the results of these experiments bear to those *properties* of the air which were excluded from these experiments: he must, for instance, undertake to reduce the air found in the aspirator, and saturated with moisture, to dry air, and, at the same time, to reduce the dry air thus found to 0 C, (the freezing point, according to Celsius,) and the normal pressure.

Thus, the problem of this chemical experiment, depends not merely upon the result found, and thus, not merely upon the quantity weighed, but also upon the *relations* and *qualities* further to be brought into the calculation.

On what ground, now, does Liebig permit himself to pass judgment upon Homœopathy according to the law of quantity only?

If a man of science, for which Liebig generally passes, can be so clearly led *ad absurdum*, he certainly will, being a confirmed dogmatist, never be brought to confess his great error. Experience has hitherto pointed that way, and to this also, that he considers himself, and those opposing Homœopathy with him, as infallible.

§. 230.

What Liebig understands by induction, we have seen in §. 97.

It is hence declared, in this quotation in §. 229, which, according to the table of contents, seems to refer to the *error of Homœopathy*, that to affirm that the efficacy of a drug increases with its attenuation, or, as we are wont to say, more briefly, that less helps more than much, *sets at defiance the common sense of mankind, the laws of nature, and experience.*

In order to set this contradiction in a clearer light, since the chief substance of this quotation from Liebig does *not* rest upon any experiments made by him at the sick-bed, or any experiments and observations made by him anywhere, but *only* upon the opinion of others, I am obliged to quote still farther, from his chemical letters, and quote something established, at least, by the experiment and observation of

Liebig himself, and which, in Agricultural Chemistry, forms the results of investigations which were undertaken for the purpose of learning the nutrition and function of grain.

In the fortieth of the Chemical Letters—edition of 1859—vol. II. page 290, we learn, regarding the action of the Salts of Ammonia, common salt, and the Nitrate of soda, upon the earthy phosphates: “It has been lately observed that Nitrate of soda and common salt *possess the property, in the most remarkable degree, even in the most attenuated dilution*, of dissolving the earthy phosphates, and that hence these salts take part in the nourishment of plants, in a way similar to that which we ascribe to the Carbonic acid water, the humus, and the Salts of ammonia.” As examples, these are given among others: 100 kilogrammes of common salt, dissolved in 50,000 litres of water, dissolve 1,500 grammes of tri-basic phosphate of lime; further, 100 kilogrammes of common salt, dissolved in 50,000 kilogrammes of water, dissolve 3,790 grammes of phosphate of magnesia.

Thus we have attenuations of common salt brought into use here, *which were about equal to the 2nd Homœopathic attenuation*. Of course, every thing is permitted to chemistry, but Homœopathy could do such a thing, only under penalty of the greatest contempt.

Upon these experiments and their results, Liebig remarks on page 292 of the same 2nd volume:

“The quantity of the earthy phosphates, which is taken up by the above-mentioned solutions, *does not increase proportionally with the saline contents of the fluid; it seems, on the contrary, to dissolve proportionally more of it, the more attenuated the fluid is.*”

These are just the very same results which Homœopathy obtained from its experiments and observations, *half a century before chemistry*, while now, for the first, chemistry has learned, in opposition to its own assertion, at the beginning of this paragraph, and on p. 105, vol. I., of Chemical Letters, that *the effect of common salt actually increases with its dilution; thus, that a little helps more than much.*

How happens it, that the most celebrated amongst the world of learned men, can, in good earnest, be guilty of such contradictions? To me, as well as to every learned man, it must be unpleasant to reply, that it comes from ignorance of the laws of nature, and, in consequence thereof, from confounding the *quantitative* causal law with the *qualitative*, and chiefly from ignorance of the law of nature, regarding the *equality of effect and counter effect*, §. 16, of which, on page 208, vol. I., a fragment is given, but of which he understands so little that he is unhappily led, on page 219, to a false and utterly unexpected conclusion.

According to the quantitative causal law, we say, of course, that an effect is single, twofold, threefold, if it is produced by a single, two-fold or threefold quantity of the cause; as a certain quantity of heat only increases the volume of a body; twice as much melts it; and three times as much decomposes it; and this causal law is truly the leading principle of chemistry; and hence the principles touching the decrease of effect, with the decrease of the efficient substance, are right, so far as they have no reference to any thing else, and whoever can maintain the contrary, after reading page 105, of vol. I., of the Chemical Letters, can readily be led *ad absurdum*. But Liebig spoke here of facts which could not be explained from the quantitative causal law, which, consequently, he should not have brought into connection with that law; he spoke here of facts which occur within the organism, hence can only find their explanation according to the law of the *immediate* reciprocal action.

This assertion, page 105, vol. I., of the Chemical Letters, "that the assumption is wrong that the effects of the drug lie in the *qualities*, that its efficacy may be *increased* by attenuation of its active principle," finds an actual and direct contradiction in many parts of the *same* work. Thus page 119, vol. II., we have: "The gluten of the cereal, the fibrine of meat, submitted to the heat of the body, readily and rapidly dissolve in water which is scarcely sour from an addition of Muriatic acid, and this solubility does not *increase*, but *decreases*, if the quantity of acid in the fluid is *increased*." In this connection, Liebig says that $\frac{1}{1000}$ part of Hydrochloric acid is a powerful solvent for the above-mentioned plastic constituents.

Thus Liebig, in order to obtain the efficiency desired, had to *potentize* the *quality* of the concentrated hydrochloric acid, according to the law of the *mediate* reciprocal action of bodies not living, by attenuating this acid a thousand times, by which process, consequently, *with the decrease of the effective matter*, he had *increased* its efficiency.

Here, again, a little helps more than much.

§. 231.

The same qualitative conditions of causality, however, have not only been known to Homœopathy for more than half a century; it has also been long known to every salt manufacturer, and before the Chemical Letters were written, that a small quantity of common salt increases the solubility of Gypsum, while the salt itself, in greater

quantities, as in saline springs, for instance, precipitates the Gypsum again, so that it is crystallized in large six-sided prisms. Liebig, with his supposed discovery, has thus *found nothing new*, and has only been unable to explain a fact previously unknown to *him*.

Chemistry, at last, will be obliged to give more attention to the *qualities* of substances, in which Homœopathy has anticipated it, half a century.

In plants, and, upon the whole, in all organisms, without exception, the law of quantitative causality has no validity; in them, the law of the equality of immediate effect and counter-effect only prevails, and every form of such a reciprocal action is a *specific form*, which, hence, reacts against the influences of the outer world according to *its* [the world's] *specific laws* of attraction and repulsion only. An instructive example of these truths we find in the thirty-ninth of the Chemical Letters, volume second, in the statements there given touching the specific function and nutrition of the duck weed.

“For many water-plants,” we there read, “whose roots do not touch the ground, other laws must exist, as is self-evident, for their reception of mineral nourishment; they must obtain it, as sea-plants do, from the surrounding medium, for, wherever a plant grows, it must find the conditions of its existence. An examination of the duck-weed (*Lemma trisulca*) presents, in this respect, interesting observations. The plant grows in standing water, ponds and marshes, and swims upon the surface of the water, so that its roots do not touch the bottom at all.”

A quantity of this plant was taken from an artificial swamp, and the composition of its ashes determined: at the same time, ten or fifteen litres of the swamp water, which had a slight greenish color, were filtered and evaporated to dryness; the ashes as well as the saline residuum of the water were subjected to analysis.

“To make the comparison more easy, I place the analysis of the two side by side.

Ashes of the Duck-weed. 100 parts of the dried weed gave 16.6 parts of ashes. In 100 parts of the ashes, under moderate heat, were contained:

Lime	16.81
Magnesia	5.08
Common salt	5.897
Chloride of potash	1.45
Potash	13.16
Soda	—
Oxide of Iron with traces of Alumina	7.35
Phosphoric acid	8.730
Sulphuric acid	6.09
Silicic acid	12.35

Saline residuum of water, from the Botanical garden. 1 litre contained 0.415 grammes of salty residuum (under a moderate heat). In 100 parts of the salts were contained:

.	35.00
.	12.264
.	10.10
.	—
.	3.97
.	0.471
.	0.721
.	2.629
.	8.271
.	3.24

The quantity of mineral constituents in these water plants, as well as in the marsh-water, may *astonish* (!) many, quite as much as it did the first observer, for, in fact, it could not well have been *supposed, beforehand*, (!) that such a plant, in its richness in mineral constituents, should far exceed the great number of land-plants. These constituents the plant took from a *solution*, (§. 223,) but, what is note-worthy, a *selection* was made. The comparison of the composition shows that all the mineral substances of the first column, as far as Soda, were found in the plant, but in *greatly changed proportions*; *that the water contained forty-five per cent. of lime and magnesia, the plant only twenty-one per cent. of both; the water contained 9.72 per cent. of oxide of iron, the plant ten times more; the difference between phos. acid, potash, etc., are no less great. The plant took up the soluble mineral constituents, as it needed them for the processes of life, (§. 106,) and, in no wise, in the proportions in which they were presented by the fluid.*

“The richness of the swamp water, in mineral constituents, is very remarkable, for the quantity of the same is more than ten times greater than in the drain water, and more than twenty-five or thirty times greater than in spring water; in its qualitative contents, we have here a mineral water, which, except in swamps, is not to be met with in nature.”

“The quantity of Potash, Phos. acid, Sulph. acid, Silicic acid and Iron, in this water, is explained without difficulty. In a marsh there gradually accumulates the residua of dying vegetable generations, whose roots have received a quantity of mineral constituents from the

earth; these residua of plants become decomposed at the bottom of the marsh, *i. e.*, they burn up, *and their organic elements, or their ashly constituents, are dissolved by means of Carbonic acid, and perhaps other organic acids, in the water*, and remain dissolved therein, when the surrounding mud and earth, which is in contact with this solution, have been saturated with them."

Here we have a clear example of the law of *reciprocal action* and the law of specification, §. 27, which Liebig attempts to accommodate to Virchow's idea of *selection*, and, we have, at the same time, a confirmation that so-called insoluble substances may be made soluble for and within the organism; in brief, a quantity of facts, the conditions of which, from natural laws, were known to Homœopathy, *this perverse Homœopathy* (!) long before it was known to chemistry.

Homœopathy has no need of the distinction between a life force and a chemical force: it has resolved these ideas into facts. Even if we take the vital force as the collective idea for all the forces governing the organism, as Liebig wishes, then there is no longer any special chemical force; for it must be contained in the vital force, and so it is, too. The whole difference, sustained for lack of analysis of ideas and facts, consists in this, that the organism has its mechanical resistances in the membranes, according to the laws of their *specific movements of attraction and repulsion*, consequently admits only a *mediate chemismus* according to its own diosmotic laws, and no immediate chemismus produced by substances alone; which (the immediate chemismus), would be possible only, when the organism lost these organic forms in consequence of external influences. Then, the *immediate chemismus* of its substance naturally enters in the rights of its given modalities.

If a plant met with thirty-five per cent. of Lime, in the water, capable of being absorbed, and appropriated to itself only sixteen per cent., and found but three per cent. of Potash, and took up thirteen per cent., then surely no choice was allowed it, but it did it necessarily by virtue of the natural determination of its specific form, and it absolutely could do no otherwise; it did it by virtue of its specific quality, to which it *subordinated* the quantities. The quality of substances in organic life determines the quantity necessary to life, not *vice versa*, as chemistry determines qualities according to quantities. The plant possesses a very great variability in regard to the requirements of its specific nutritious substances, and always thrives better by means of a small quantity than of larger quantities thereof, as is the case with the human organism.

Liebig himself says, on this point, among other things, page 328, II., "with the *quantity* of the means of nutrition, *their chemical effect increases*, and, presented to the plants in certain proportions, they *become sick and die*," and upon the next page, "the enriching of the soil with organic matters, seems for many plants, a *cause of disease and death*." But the law of this quantity, the law of the dose, chemistry again knows not at all. In the example of the Duck-weed, we see it take up the most, from those substances which were present in the water of its marsh in the *least quantity*; this cannot be explained by its necessity alone. These organic motions are founded in quite other natural laws, than in the hypothesis of a selection; in natural laws, which have long been known to Homœopathy and used by it at the sick-bed. Even the law of the specific lines of direction of substances within the organism, is unknown to chemistry, §. 106, and the facts which relate thereto, it hence considers as resting upon unknown grounds, without thinking to look for the law upon which they rest.

It knows, right well, that without Phosphoric acid in the ground, no grain can be developed; without Silicic acid, no straw, and without nitrogenous substances, no leaf, because it found these constituents in these parts of the plants, and, hence, drew the inductive conclusion that the phosphatic and silicious earths and nitrogen were the means of nutrition for these parts. But had it known the law of nature, why all these things must take such a course as this, the strife about nitrogen or the constituents of the earth, would never have occurred in Agricultural Chemistry. This law of specification was known to Homœopathy at its very birth, and, indeed, was one of the conditions of its very existence.

"That a plant should bloom and bear seeds (p. 326, II. Chemical Letters.) it *seems* to many to be a necessary condition, that the activity of the leaves and roots should reach a *certain limit, a point of rest*; from this point forward the vegetative activity *seems* to have gained the upper-hand in a new direction, and the juices present, if they are not called into requisition for the formation of new leaves and root-fibres, serve now for the formation of flowers and seeds." But it not only seems so; it really is so, in consequence of the above-mentioned laws, under which the *sexual process must occur*, provided food is supplied to the system, and that, too, upon the ground of the simplest of the laws of Nature, that of the attraction of unlikes and repulsion of likes.

It needs no further investigation to prove that Liebig, in his decision, p. 105, I., where he appeals to experience, can have deduced those experiences only from cases of the quantitative causal law; that Liebig's own experiences are *in favor of, not against* Homœopathy; that he, however, does not know the ground of these so-called experiences, with common salt in the second Homœopathic dilution, etc., and consequently fell into a fallacy, which originated in the arbitrary appeal to the quantitative causal law, for cases which are to be found under the law of the equality of effect and counter-effect.

Why Homœopathy engages in the manipulation of shaking and triturating, so offensive to Liebig, as we see from his Chemical Letters, p. 105, Vol. I., is explained from simple mechanical grounds, according to which, bodies by a natural law, (and as Liebig himself admits), can only operate upon others by their superficies, and because, by shaking, soluble bodies, and by triturating, insoluble bodies, gain in superficies.

If one reads these Chemical Letters, he will find himself quite at a loss to explain the ever-recurring contradictions of the assertions made therein on p. 105, Vol. I.; not only as regards the attenuations, but also as regards the triturations. On p. 295, Vol. II., for instance, it is written "the *heaviest* manuring with the earthy phosphates and *coarse* powder can hardly be compared, in its effect, with a far *smaller quantity in a minutely divided state*, for, from this latter, we have the effect that a particle of the manure is to be found in all parts of each small bit of soil. A single root-fibre requires *infinitely little* from the ground which it touches, but it is necessary, for its function and its existence, that *this minimum* should be present at the very spot." Do we not hear a Homœopathist speak, who gives us his experience, that drugs must at least be so reduced and triturated, that they are smaller than the corpuscles of the blood and the calibre of the capillary vessels, the roots of our nutrition, in order that they may be taken up from them, and that directly, from the tongue, or in the throat, etc. Even the difference between function and nutrition is hinted at by Liebig (though from his ignorance of these relations not very clearly), in those cases where common salt acts as a functional and the phosphate of lime as a nutritive means.

Thus, at least, Chemistry has gone blindly into the net of Homœopathy, and this event was to be expected, as soon as Chemistry mounted from the laboratory, into the realm of the living organism.

Liebig cannot seriously mean to take Homœopathy to task (page 105, Vol. I.) that it transfers its drugs to relatively indifferent substances, as alcohol or sugar of milk, in order to preserve and finally use them, for, on p. 261, Vol. II., we read, "The particles of the soil, however, *do not only hold fast* whatever of vegetable matter is in them, but their power to furnish to the plants, what they need, reaches much farther. If rain, or other water, which contains Ammonia, Potash, Phosphoric acid, Silicic acid, in a state of solution, is brought into contact with the soil, then these substances leave the solution almost at once: the soil appropriates them from the water. If the soil did not possess this property, then these three chief nutritive substances *could not be kept in the earth.*"

Now, this is just what Homœopathy seeks to do, and that it succeeds to retain its drugs in their vehicles, as the soil retains those nutritious substances, every day proves. I cannot imagine how Homœopathy has thereby offended experience and the common sense of man.

By forces, finally, and qualities, Homœopathy understands nothing different from Chemistry. In Homœopathy *forces* and *qualities* are nothing but the physical, chemical, etc., properties of substances, and hence, if Liebig should imagine (p. 105, Vol I.) that Homœopathy still possesses *certain other* forces or qualities, he is in error. Homœopathy is, in that respect, as well as in every other, far in advance of Chemistry; for it knows, at the same time, that, as regards its Therapy, just as regards the supply of nutritious matter to plants (*for even its Therapy is founded upon the laws of function and nutrition,*) the quantities of substances, for this purpose, are to be measured according to the laws of the equivalents of motion, but the qualities according to the laws of specification, and both within the law of the reciprocal causality of the organism.

§. 233.

Besides, that Liebig does not yet know the law of the equality of action and counter action, and thinks that he can supply its place in the strife against Homœopathy by that of quantitative causality; besides this error, he commits two others, upon this unfortunate page 105.

One of them consists in this, viz., that he allows himself to be led to believe that medicine was taking the lowest place, as an *inductive science*, among sciences which have for their object the knowledge of

nature and its forces. If this is to refer to physiological medicine only, then, according to the previous paragraphs, no objection can be made to it; but as regards Homœopathy, I have some scruples. First, for instance, the question presses itself upon us, whether Liebig himself was *inductively* led to the adoption of this opinion. Induction presupposes a leading principle, for the undertaking of experiments and observations, and the result of the observation made, is then expressed by an inductive conclusion. The flattering curriculum vitæ of medical science which he thinks he must infer from the history of medicine, and furthermore, the views of his medical friends, may contain a leading principle, which should induce him, by experiment and observation, to search the matter to the very bottom, nevertheless nothing of the kind, done by Liebig, meets us in any of his writings: that is, he has never yet treated one patient according to Homœopathic principles, much less cured one. In such a case, I should, at least, have omitted to have uttered *arbitrary and non-inductive opinions*, regarding a vastly comprehensive science and with the same breath to have reproached this very same science regarding the *laws of induction*.

If a chemist should once have treated a patient and cured him, or one of those patients which have been declared incurable by physicians of the old school, but of whose subsequent cure this work contains examples enough, (and their number might easily be increased,) then Homœopathy might declare him her equal, and hold him capable of speaking upon physiological, pathological and therapeutical subjects. As long as a chemist cannot show that he has accomplished such a result, I would bid him, in all modesty, to be silent. Yes, I will content myself with not asking quite so much, yet if I read, according to p. 311, Vol. I., of Chemical Letters, "by the knowledge of the cause of the origin and propagation of putrefaction, in organic atoms, the question touching the nature of many contagions and miasmata admits of a *simple* solution," I would like to ask for a direct answer to this simple question: Why then does *not* Agricultural Chemistry heal the potato-rot and the grape disease? It should first obtain therapeutical successes, at least within its own proper realm, before it undertakes to speak of things which it cannot understand, because it is not practically occupied with them; because its theory concerns only the quantitative causal law, and it is not versed in the laws of the organic reciprocal action of plants, even of an organism which has no heart, no stomach, no nerves, no blood, no brain, etc., but, as an advantage, has immensely great possibilities of compensation to enable it to dispose of superfluous matters, and to keep it

unharméd under great deprivations; of an organism, which presents nothing but the lowest stage of sexual life, and whose cure from diseases hence ought to be effected far more easily than that of a human being; one need only throw the constituents of its own ashes upon the ground, to afford it proper nourishment.

The other error upon that page (105) is a dialectic one, since, at that place, the assumption that drugs "increase" in efficacy as they are attenuated, is contested; for increase or decrease, more or less, etc., express only statements of a proportion, and it ought first to be determined of *what kind of a proportion*.

It must often be attended with the greatest difficulties to construe for one's self the ideas, the characteristics of objects, and to bring order into them by the aid of reason, that is, with that faculty of reason which discriminates ideas and conclusions, and is able and willing to make them clear to one's self.

It must be attended with the greatest difficulties to see the difference between the *dependence* in space and the *simultaneity* in time, as it is wont to occur in the organic movements.

We wish, for instance, to eat, for the sake of nourishment, certainly an every day occupation, and yet a very reciprocal process. Thus, for this purpose, the means of subsistence must first be at hand, they must be put into the mouth and chewed, and thereby be reduced. These acts follow each other, as cause and effect, and can by no means ever occur in an inverted order; but they occur at the same time with all the other motions of the organism, on account of which it is that we must eat. As soon as we begin to chew, there is thereby given, within that succession, a manifold reciprocal causality of various motions. By chewing, the surface of the morsel is increased to countless superficieses, and, at the same time, the saliva is also present, with which those increased superficieses come in contact; at the same time, moreover, with this contact, the chemical changes which are thereby made possible, of the portions chewed and the saliva, take place; and the smaller the fragments of the morsel are made by chewing, so much more saliva will and can be used for this chemical action.

Now it would be foolish to say: *the more I eat, the more I am nourished*, or, *the more saliva is excreted, the greater is its chemical action*; for every plus of saliva would remain utterly without effect upon the fragment of the morsel, with which only so much saliva can come in contact as its superficieses, by which it may be taken up, permits; and what I eat more than I can digest, subserves no longer for nutrition.

We see, also, the folly of those assertions, at once, as soon as we bring to the subject—saliva—that of the morsel chewed, and, to the subject of food, that of digestion, without which apposition those assertions would be void of meaning, since we can only form an opinion of comparison between two subjects and between two predicates of one and the same subject, but not between the two *comparative ideas*, “more,” for the subject saliva, and “greater,” for the predicate of the effect.

Hence, the scheme of Liebig is utterly erroneous, according to which, to one single subject, two ideas of proportion are given, and one might say, or rather, must say, under penalty of stultification of his common sense: a greater quantity of saliva produces more effect than a smaller. That may be true in one case, but in another is just as false, and is, and ever will be, an equivocal, and by no means correct, conclusion.

But this fallacy, from mere ideas of relation, has become so widespread and stereotyped that even learned men think that they may use it without fear, as a lever wherewith to unhorse this offensive Homœopathy.

It indeed requires an immense patience to read such insolence as that of Liebig, Virchow, Wunderlich, etc., without meeting them with a like overstepping of the bounds of good manners. Nothing but the consciousness of superiority, could content one with saying nothing farther than to establish the facts, in order to be able to demand that, to each separate assertion, the proof must be furnished, all the more definitely, if by it, an insult has been expressed; otherwise it would look as much like a calumny as two hairs resemble each other.

§. 234.

To speak of the ignorance of the *Dii minorum gentium* as it still blooms out against Homœopathy, in the Gartenlaube, in Romberg's Wissenschaften des 19 Jahrhunderts, and elsewhere, this we may decline on very respectable grounds.

But what would Liebig say if a learned man should appear, and, without having himself made any observation, or any experiment upon the relation of plants, in their reciprocal action with the outer world, should have more than the audacity to declare that all which Liebig had established, by his experiments and observations concerning the laws of the reciprocal action of the vegetable organism, *contradicted sound human reason*, since, according to the law of quantity, or quan-

titative causality, a less quantity of common salt could not produce more effect than a greater? Liebig would seize his head with both hands, to assure himself whether he still lived, a thinking man amongst his fellows, amongst learned men, who could be guilty of such fool-hardy blunders; but beyond such counter-assertions and his experiments, he would have nothing to oppose to such an adversary, who, on his part, would stand firmly, neither to believe the one nor to imitate the other as directed. Not till Liebig could charge him with making a one-sided assertion, arising from the category of quantity, in which the laws of quality, relation and modality, were forgotten, could he give his adversary a decisive blow. But these laws are unknown to Liebig himself, and therefore, Homœopathy finds itself in the position to him and his consorts, in which Liebig would find himself in relation to such an adversary.

But what would Liebig do, if those who accidentally had the power, should order that *the ground should never be tilled according to Liebig's views*, though they had never subjected these views to any experiment, in *conformity to natural laws*, in order that they might understand and comprehend them, but should characterize them as a swindle and quackery, not to say anything of other friendly epithets?

The answer to these questions I leave to the reader, and only remind him that Homœopathy, as is well known, enjoys this very same paradoxical position, in many lands, and that this position is caused by nothing but the irremediable prevalence of the errors set forth here and in previous paragraphs, of "*learned men*," who do not think for themselves.

It would need a work specially devoted to the subject, and not a small one, to set forth all the *logical*, physiological, pathological and therapeutical errors, which are found in these Chemical Letters. To assume to speak authoritatively upon Physiology, Pathology and Therapeutics, requires much more comprehensive knowledge than the author of these letters possesses, and, judging by his antecedents, more than he ever can possess.

What, now, shall we think of the words of Virchow: "But the belief is utterly nonsensical, that, a *less* quantity of a given substance will effect more than a *great* quantity of the same substance"? The Professor has thus never yet got so far with his studies and experiments as to discriminate between the massive state of a remedy and its free state. The law of causality, in Physics and Chemistry, he seeks to impose upon the organism; he fancies, even, that he possesses the prerogative to be allowed to give proofs and counter-proofs, with ideas dependent upon relation, and errs thus in a three-fold manner regarding

the laws of nature and of thought. Where, now, lies the nonsense, in him or in the facts? And who was the author of this nonsense? Who did not understand the facts?

His treatises entitled "*die Einheitsbestrebungen in der wissenschaftlichen Medicin*," contain the above passage, and present nothing which looks like scientific medicine, for their substance is directed against the laws of nature, consequently they are *not* scientific, and instead of aiming to attain a *unity* among physicians, he has not only shown himself utterly incapable of this, but he seeks for the means of making still wider, this dishonorable separation.

When *experts* encounter each other with such relative ideas as — increase, decrease, little, much, like, opposite, primary effect, secondary effect, and really, and truly in all earnest think that they have established intelligible opinions as binding upon all parties; when they have strayed so very much from the laws of Nature and of thought, that, instead of allowing to every body, every cell, every organism its specific properties, causalities and reciprocal actions, and investigating them, they attribute to them, (which of course is done with much less trouble,) invisible forces and such as are inaccessible to experiment and observation, such as chemical forces, catalytic forces, vital forces and, still added to this, vital forces of a higher and lower kind, without being able to declare even from what idea of subject or predicate they must be deduced: in such a case, it is no wonder if *laymen* also are hereby deceived, for it is quite intelligible that one box on the ear hurts less than three, and less intelligible that well-grounded advice, or even a kind look only, might have often accomplished far more; nor any wonder if prohibitions can be obtained against a science, which, above every other, would be the greatest blessing for the entire humanity; a blessing which, in consequence of such errors, can at present, unhappily, be bestowed only on a few.

§. 235.

According to Liebig, besides the vital force, which is unintelligible to Homœopathy, there are also several other forces.

Liebig himself, regarding the origin of his assumptions, presents us nothing that bears the character of a proof. True, we read in the Chemical Letters, p. 25, Vol. I.: "If we discriminate between the effects which belong to Chemical force, and those which belong to the vital force, we find ourselves in the way to gain an insight into the nature of the latter. Chemistry never will be able to produce an eye, a hair, a leaf. But we know certainly that the origin of Hydro-

cyanic acid and the oil of bitter almonds in the bitter almond, of mustard oil and sinapin in mustard, of sugar in sprouting seeds, is the result of chemical decomposition; we see that the stomach of a dead calf, with the help of a little hydrochloric acid, acts upon meat and coagulated albumen, just as the living; that both became soluble, *i. e.*, digested. All this justifies the conclusion that, upon the road of scientific inquiry, we shall obtain a clear insight into the changes which nutritive substances undergo in the organism, as well as into the effect of drugs."

Do we know now what is vital force and what is chemical force? We learn, in fact, just as little about it by reading through the previous twenty-four pages as in the subsequent. Or does Liebig think that an eye, a hair, a leaf can exist without a vital *chemistry* [Chemismus], and are chemistry and chemical force one and the same thing? Should he but know the laws of diosmosis and specification, then all this would be clear to him, and the assumption of such forces would be superfluous.

Perhaps we shall gain some information upon these questions, if we inquire what Liebig means by *force*, in general.

In Vol. I. page 33, we read: "The natural philosopher of to-day *explains*, by searching for, the causes which have preceded the phenomenon; the causes perceptible to the senses he calls *conditions*; the causes which he can no longer perceive by the senses, he calls *forces*."

Accordingly, the miasmata which are no longer perceptible to the senses, are not substances, but forces!?

Or, if the vapors of Mercury, which no longer can be perceived by the senses, produce salivation, then Liebig, notwithstanding this his definition, cannot hesitate to say, if he would express himself correctly, that one of the forces of the quicksilver, in combination with the organism, had produced this; for to all other forces of quicksilver, with other combinations, this predicate — to produce salivation — does not belong.

How, even for this simple case, could the difference between that effected by the vital force and that by the chemical force be established? Where is the rule, the law, for this? In Liebig, nothing of the kind is to be found.

This confusion, however, may be dispelled very easily. Liebig, for instance, does not know that he, with the *ideas* advanced and maintained by him — such as chemical force, etc.—gives us nothing but mere *predicates* which lack objects, which consequently contain no proposition, by which hence nothing is stated, still less is anything demonstrated, or can be explained. The predicate "chemical," for example, and the predicate "force," can apply to an *infinite* number of objects,

while these predicates in and by themselves, or united, are and remain, mere *empty places*, which may be filled with all possible imaginations, as long as no realities or objects, as in the example above, quicksilver and organism, are joined with them.

To *explain* salivation, the natural philosopher of the present day, according to Liebig, Vol. I. p. 31, need only ask: "*what precedes this phenomenon; what follows it?*" And if the taking of quicksilver into the organism precedes it, and the falling out of the hair and teeth follow it, that may be, to a chemist, a sufficient and brilliant explanation, but for the natural philosopher, for the therapist, as Homœopathy desires him to be, this poverty in knowledge would never be sufficient.

From the foregoing, it is now apparent why those whom Liebig, in the year 1859, qualified as natural philosophers of the present day, hold as incomprehensible, not only the facts adduced at the beginning of the previous paragraph, but also many other things in Homœopathy, and hence that, according to §. 4, all this appears even impossible to them.

It comes essentially within the scope of this work to combat, according to the laws of nature, as often as possible, another *fundamental error* of Liebig and *his* natural philosophers of the present day, universally hurtful to every progress in natural sciences, that, namely, which would derive the explanations of natural phenomena, *simply and solely*, as we have just seen, from the *causal law*.

If we take, for instance, the process occurring on the introduction of oxygen into the organism, then *cotemporaneously*, with the attraction of the oxygen, by the porous and elastic blood-cells—which attraction without *synchronous* condensation would be impossible, according to natural law—the equivalent of simultaneously produced heat belonging to this motion will also manifest itself, in accordance with natural law, at the same time, *i. e.*, as the equivalent of expansion, etc., *and that, indeed, not according to the law of causality*, but according to that of the equality of the action and counter-action *immediately*, just as, mediately, in Dobereiner's "Zündmaschine," the hydrogen is not the only *cause* of the ignition, but chiefly the platina sponge, because it condenses the gas.

That this *actually* takes place, on the reception of Oxygen by the blood, Physiology has already experimentally demonstrated, having found that the blood-cells attract Oxygen with the greatest energy, unite with it, condense and excite it; but these functions also have their limits, for, even with a temperature of 45° C. (113° F.) the

blood-cells lose their property of becoming bright red under the action of Oxygen.

Hence, the organism possesses, in the blood-cells, *independent regulators* for the influence of Oxygen upon itself, consequently, also, upon its *process of respiration*. For it is shown by experiment that, for example, where the atmosphere contains the same amount of Oxygen, hence *independently* of it, the influence of the magnetism of the earth, twice in the twenty-four hours, and at various times through the year, directly *increases* and again *diminishes* the development of *Carbonic acid within the organism*, and within the blood also. Thus, “the kidneys and the rectum” are not “the only regulators of the process of respiration,” as Liebig will have it, p. 18, Vol. II. They are so *at the same time* with all the other regulators of the exchange of matter, and one cannot ask, according to the causal law, *what has preceded the one or the other, and what has followed?* Only in the reception and giving off of matter, can we observe a succession within this same space of time; but the phenomena of co-existence of cause and effect, within a completed whole, could never be explained according to Liebig. And if I add to this, that Schönbein is inclined to ascribe the effect of the blood-cells upon Oxygen to their containing iron, then the question arises again: which of all these movements is subordinate to a chemical, which to a physical, which to a vital, force, not to confound this with a “living force” in mechanics, and this without ever discovering an answer thereto, according to natural laws.

By the way, to this view of Schönbein, Scherer remarks: “But this, in view of the small quantity of iron contained in the blood-cells must be, *horribile dictu*, a Homœopathic effect.” Yet this view—of course, one must only not forget in this connection the contemporaneous effect of the cell membrane—is already verified by many experiments. Hence, it looks every way probable that Physiology, led by its own experiments, in a little while will stumble upon the laws of Homœopathy—as Chemistry has already done *blindly*—upon the laws of this very Homœopathy which, according to the conviction of its adversaries, (§. 3.) is either deceived or deceiving.

§. 236.

On page 7, vol. II., we read: “*The reciprocal action of the constituent parts of food and of the Oxygen, distributed in the body by the circulation of the blood, is the source of animal heat.*” However, we should delude ourselves by believing that, *on account* of this passage, we might suppose that Liebig was acquainted with the law of

equality of action and counter-action; on the contrary, with that sentence, Liebig only intends to express the *quantitative causal* reciprocal relation between the supply by food and the loss proportional thereto, through the influence of the Oxygen, that is, the dependence of one upon the other.

This, however, is false! for, according to the law of the equality of action and counter-action, that source of animal heat presents us with only *one* of the conditions of the organic production of heat, while the others are grounded in the *functions* according to the law of the specification of the organism. Thus, for example, the *quantity* of substances which goes over from the chyme into the chyle and the blood, and is taken up for purposes of nutrition, is *exclusively dependent* upon the *superficial extent* of the absorbent surface of the epidermis and of the lungs, and of the *degree of moisture* of the air; and, at the same time, the equivalent of heat, which is produced by this mechanical labor, is again *independent* of the influence of oxygen, just as much so as the sources of heat are, which spring from the other organic momenta of adhesion and friction, produced by the *movements* within the vessels, by those of the heart, the lungs, etc., leaving further ones out of consideration.

How could we otherwise connect and correct Liebig's assertion, p. 8, Vol. II., "the higher temperature of the animal body, or if it is preferred, *the throwing off of heat is mainly, and under all circumstances, the result of a combustion* of combustible substances with oxygen," with, and by, that on page 208, Vol. I., where Liebig himself says, on the other hand, "*motion is the cause of heat*"?

Or does Liebig think that the fundamental laws of motion, without the organism, do not also hold good for motion within the organism?

Only when we recognize *one body as the cause* of change in another, do we, in general, call the ground of its action or activity, *force*. But Liebig always permits this *causal-predicate* 'force' to appear as doing something, for example in p. 206, Vol. I., where he says, "a force operates by pressure and attraction." Another *lapsus ingenii* happens to him regarding the *molecular object* "heat," as we may read, for example, p. 218, Vol. I., "heat" which elevates and raises the temperature, does not press and draw, but "*warms*."

Thus warmth warms! Liebig *teaches* us, as sound sounds, and wood is wooden! Though we can pardon anything in Liebig, since we estimate his services very highly, yet we must call his attention to such pitiable tautologies, used by way of explanation; since it is he who speaks so violently regarding the *errors* which exists in Homœopathy, the demonstration of which he has yet to furnish; for, the vast

majority of learned men of dependent thought, still look to him as to an oracle, ready to lend his assertions unlimited credit.

If, finally, heat does not draw or press, how could it — in the very example adduced by Liebig himself, p. 212, Vol. I. — by means of the equivalents of mechanical labor of those iron bars, (which equivalents were due to the various degrees of heat,) have been able to restore the cracked and sunken-in arches of the Conservatoire des arts et métiers in Paris?

Truly a doctrine which, like Homœopathy, regards explanations only which conform to natural laws, can find *no* recognition *there*, where the most prominent teachers, so very much misunderstand the existing laws of Nature, that they are obliged to explain natural phenomena according to their own *subjective opinions*.

In view of the chaotic confusion of ideas which has arisen therefrom, it might be advisable *for each writer* to give an account of all the ideas used by him, and when I speak of *error*, in opposition to truth, it is evident, that, in natural sciences, error is always at home there, where *the invisible fundamental truths*, where the *direct perception* of causality, of power of resistance, of the constancy of masses and forces, of the equality of action and reaction, *the categories* of quantity, quality, relation and modality, and all belonging thereto, are left out of consideration. *Error*, hence, does not proceed from the relation of our perceptions to the objects, but from the relation of the *judgment* to the direct perceptions, hence, *from an understanding*, which is incapable of forming *objective conclusions* from phenomena. Hence, everything is false that cannot be affirmed or explained from our direct perceptions, or which entirely contradicts them. Deeper, however, than error lies *ignorance*, which often announces itself thus, that it seeks *to explain* natural phenomena, which come under the law of the equality of action and counteraction, by the causal law, and *vice versa*.

Hence, all attempts to make natural sciences, Therapeutics included, subordinate to chemistry (*chemicifren*), are in vain, and sooner or later must come to naught. They can, upon the whole, be undertaken from one stand-point only, from that which estimates the logical instrument of *induction* the highest, as is clearly the case with Liebig, who, however, never succeeded yet in attaining his end. While induction, exposed as it is to doubt, holds, in the eyes of Homœopathy, a subordinate position in deduction, §. 90, Homœopathy rises to the level of the fundamental principles of natural laws, from which Liebig, Virchow, Wunderlich, and their fellows, are yet far distant, but which, on that account, *can* be just as little understood by them as

any other discovery of Homœopathy. Thus, under no condition, can the causal law, in its relation to cause and effect, comprise the whole truth and offer full protection against error; but it would be absurd to take *the opinion* of an authority, even the highest, for a criterion of the truth, and these few examples of the logic and dialectics of Liebig will suffice for a proof that Liebig's authority can not affect the correctness of the Homœopathic dose. *Therapeutics according to natural laws, is emancipation from authority and tradition!*

§. 237.

In the great East, in Austria and Russia, no one has any fault to find with Homœopathy; there, it is fully recognized that, among all classes of society, the physician alone can draw the greatest profit for himself individually, only from the best possible and most successful treatment of his fellow beings; while all others, it is true, are also in the service of society, but more for the sake of gain and less for the benefit of their fellows. The West, however, England for instance, delights in persecution, on grounds already repeatedly set forth. But in France, of late, a change for the better has taken place. However, where we find a large part of the population trusting in Homœopathy alone, and, on this account, Homœopathy must be tolerated, there physicians are forbidden the right to dispense their own medicines. But then, what control would remain to the government over the preparation of such drugs as are beyond the reach of chemical tests, if it were not permitted to every physician to detect the cause of negative results at the bed-side, by the exhibition of remedies prepared by himself, since the cause of these negative results can only lie in the improper preparation of the remedy? From the manner of preparation of these Homœopathic tinctures, triturations and attenuations, everywhere alike, in Europe as well as in America, and all parts of the world, according to the prescribed and strictly observed quantities and qualities; furthermore, from the treatment at the bed-side, strictly according to natural laws, any failure of success must chiefly lie in the manner in which the drugs are prepared, whether it be produced by carelessness in the preparation, or by external injurious influences, to which, for instance, strong odors belong; these, as no Physicist will dispute, may make all attenuations useless and inefficient. From these grounds based upon experiment and observation, an Allopathic drug store can never be kept in the same place with a Homœopathic, nor can the Allopathic druggist ever dispense remedies in the Homœopathic store, since strong odors, those like Camphor

especially, cling so closely to their hands and clothes, that they can never be removed rapidly enough.

Science has nothing to command, only to explain. Since the impossibility has been seen of shaking the inner truth of Homœopathy and its impregnable pillars based upon natural laws, an attempt has been made to injure it maliciously from without. Where it could not be forbidden at once, without causing much noise, it has been arranged, as experience teaches, not only to establish badly managed Homœopathic pharmacies, which, without the full control of Homœopathic physicians are of no use, and hence might as well not be, or the assistants of Allopathic pharmacies were allowed to come into Homœopathic pharmacies, which thus makes it actually impossible for one to get Homœopathic attenuations from them.

Against such a procedure, as against one which destroys its very aim, Science must always and everywhere protest. It would, perhaps, be more advisable to issue, without reserve, a general edict against the practice of this method of cure; but surely this would prove to be of but short advantage, for natural laws cannot be permanently repressed, because they belong to the community at large, and remain common property.

§. 238.

Now because Homœopathy is in every respect an incomprehensible subject to its opponents, these opponents shall be set right, and that by an English writer. John Stuart Mill expresses himself rightly, and in an annihilating manner, in his *System of Inductive Logic* (p. 461), with regard to such errors, arising from lack of comprehension, by the following example:

“It is inconceivable,” said Newton in one of his letters to Dr. Bentley, “that inanimate brute matter should, without the mediation of something else, which is not material, operate upon and affect other matter *without mutual contact*. That gravity should be innate, inherent, and essential to matter, so that one body may act on another, at a distance, through a vacuum, without the mediation of anything else, by and through which their action and force may be conveyed from one to another, is, to me, so great an absurdity, that I believe no man, who, in philosophical matters, has a competent faculty of thinking, can ever fall into it.”

This passage, written in big letters, should be hung up in the study of every man of science, who is ever tempted to pronounce a fact impossible, because it appears to him inconceivable. In our own

day, one would be more inclined, though with equal injustice, to reverse the concluding remark, and consider the seeing any absurdity at all, in a thing so simple and natural, to be what really marks the absence of "a competent faculty of thinking."

"Gravitation, without an interlying medium, may be incomprehensible in itself, but even if one assumes it to be incomprehensible, yet this may be a limitation of our own minds, without being a limitation of nature."

This reproach applies not only to Allopathists, to whom the efficacy of all attenuations appears inconceivable, but also to many Homœopathists, to whom the efficacy of high potencies sounds like a fable.

But the contents of this work will show, beyond a doubt, that both parties are wrong: and if we consider that to them also the well-being of man is entrusted, that hence they should know all the means which can help the patient towards health again, then every *a priori* depreciation of the practical experience of others, exposes one to the reproach of the most revolting want of conscience. This heathenish want of conscience every physician stands accused of who has not studied and properly applied the whole of Homœopathy. for to this inexcusable want of conscience, thousands of human lives fall victims every day, and the French Academy of Sciences, which surrounds this want of conscience with the nimbus of its authority even, cannot too soon and too openly recant its gross error. §. 226.

§. 239.

We have now just arrived at that point where we may say that the dose *must be left to each one for himself*, because, 1st, The ineffectiveness, even of the smallest dose, cannot be affirmed in accordance with natural law, so long as it has not been determined by analysis of the infinite, for each separate substance, in what proportions the capability of contraction *within*, and in connection *with*, the fluid suspending its molecules, decreases under increasing quantities, and, in what quantities thereof, the molecules of the body experimented with, are so far apart that no influence upon the human organism is any longer apparent. 2nd. Because, till this task has been perfectly accomplished, for every substance, to be used as a remedy, it must be left to every physician to operate with those quantities which he, by his own individual gift of observation deems useful for his object, since the art of observation forms the only instrument of the physician which presents him with a differential diagnosis, showing, whether a symptom belongs to the cause of the disease or to his remedy, (*i. e.*, remedy

given by him). The dose for each separate case is, at the present, to be found empirically. But no empiricism alone satisfies science; it must have the natural law also, else there is no rest. For these cases, the differential calculus discovers the law of the efficiency of every force, of every substance in the state of its molecules freed by attenuation, consequently it discovers also the cause. Here mathematical language and investigation are quite in place, and not in order to cover up an unexplained fact by a mathematical formula, as medical Physics has sought to do for cases which have to be made approachable yet to mathematics by experiment and observation. Here the secret of the connection between cause and effect of every degree of attenuation is exhibited in the nicest manner. As long as this is not yet accomplished, nothing can be said against the assertion of a physician that he has observed the reaction of the organism under the use of a substance in the 1st, 10th, 100th or 500th attenuation, for he has had experience thereof. This must be taken as a self-substantiated fact, till, by experiment, according to Jolly's process, observation according to natural law, or mathematics, has proved its correctness, and all otherwise idle strife about the question is hence discreditable for men of science and intellect. Subjects of mutual instruction, surely, should not, in our days, which claim to be so enlightened, degenerate into matters of strife.

The assertion that he must be called the best, *i. e.*, the most practiced observer, who accomplishes the most at the sick-bed, with the least, must, after what has been already said, be indisputable.

If a physician of the physiological school had ever considered, that he could not change the movements which are produced by a morbid cause in the organism, as regards their weight, and could meet with nothing but qualitative *equivalents*, then he would long ago have arrived at some general laws of dose. That, however, runs counter to the usual mental association, an association which has been brought about by chemistry. Notwithstanding this, daily experience teaches him that most causes of disease arise from imponderable substances. Or, has any chemist ever weighed the needful quantum of injurious atmospheric air which must be inhaled before cholera is produced, or that necessary for the production of cholera or typhus recurrens; or how much air of a marsh, before intermittent fever is produced? etc., etc. On the contrary, we know all these morbid causes only as *imponderable qualities*. Since, however, these qualities may produce powerful symptoms of disease, and even destroy life, it is thought that such lusty goblins can only be driven out by large quantities, which, probably, approximate to the weight of the usual quantity of food. The majority of physicians

have drawn, and still draw, conclusions regarding the quantity of the morbid matter from the *extension* and *intensity* of its results upon the organism, *thus concluding from the qualitative results to the quantity of the cause*. Since, now, a conclusion from the quality of a result, to the quantity of the cause, is not allowable, nay, even absurd; so all traditional doses rest upon very obvious fallacies, and, at least, are justified by nothing. Some seem to think that, if a man can lose the greatest thing he has, his life, by morbid causes, then the quantity of these causes must be as great as a man, if not greater, and hence, in the least possible time, substances are gradually introduced into the system which, when added together, in case of a single disease, reach the most inconceivable quantity.

§. 240.

If this were not right, an adherent of the physiological school might reply, how did it ever happen that so many diseases, under the influence of such great quantities as are found in his prescriptions, were cured?

Without regarding the inductive false conclusion of *post hoc ergo propter hoc* lurking here, and admitting that such cures do sometimes really happen; disregarding, also, the injurious contingent symptoms which must necessarily arise from such treatment, as we shall see anon, in these cases it may be deductively demonstrated, at any time, that then a specific was accidentally used, and an *involuntary Homœopathic treatment* took place. Thus, in all cases where, in spite of large Allopathic doses, a Homœopathic cure occurred without injurious secondary effects, the hurtful over-plus was rendered harmless by the secretions of the stomach and bowels, and carried off; or, whenever the solution was thicker than water, only so much of it passed through the coats of the stomach as exactly sufficed for this result.

Surely it has often been observed, in every clinic of this school, that a convalescent, lying near a patient treated by mercurial inunctions, became salivated, without ever having taken quicksilver internally or externally. Such a thing is noticed with indifference, as a curiosity; no one would think any more about how it happened, that even *imponderable* quantities of quicksilver, in the form of an exhalation, could produce the same phenomena as substantial and larger quantities. For, if any one of these physicians had ever occupied his mind with this process, he would, according to the demand of humanity, have attempted, most diligently, to find out in what quantities, smaller than the traditional, in what imponderable quantities, it might be

introduced into the organism, so that it should do nothing more than was absolutely indispensable for the purpose of a cure, without producing salivation, which can never be a condition of a cure, because it always presents an injurious over-plus.

By what explanation can such striking neglects be excused? From the natural indolence of the human mind, from which springs the law of association of its habits of thought, and at the bottom of which, besides that already named, three principal causes may mainly lie. One in the form of belief in authority. *In verba magistri jurare* may be right in politics, in science never. The evasion is then used: I learned this in school — this and that authority does so; why should I trouble myself any more with thinking about it, or be vain enough to believe myself able to do it better? Then (2) in the form of contentment with the various qualifications required in the various countries, for why inquire whether the adherents of Rademacher and Hahnemann pursue other studies and have better results to offer? Pshaw! that's not necessary, because the Faculty does not examine on those points, and the Government expects us to know nothing more than is required by its laws. 3rd. Finally, in the exquisite form of the natural indolence of the human intellect; for Father Broussais has pushed Therapeutics into the domain of Physiology, and, for the present, lulled the self-activity of the intellect.

For everything which I here, and in this whole work, utter, and to every one whom it displeases, I can offer the proof of its being true, and can adduce hundreds of facts from literature and practical life. It is that law of the mind which prevails here and directs to that road, to be able to depart from which, requires much experience, and then the question still arises, whether the new road, entered upon with great labor, does not lead to opposite errors, of which, also, there are examples enough at hand. In fact, under such great difficulties, is it not probable enough that one in escaping from Scylla might fall into Charybdis?

§. 241.

MANNER OF USING THE REMEDIES.

We find that orthodox Homœopathy has not remained entirely free from this danger. It feels, for example, the necessity of removing the impediments which are caused by the retention or formation of injurious substances within the organism, and which retard the cure.

But before it forsakes its principle, it remains idle rather than give

a laxative or an emetic, setting out from the fundamental principle that, *provided* the remedy exhibited is indicated according to natural laws, it must hence invigorate those parts, the inactivity of which, causes such retentions. But this "provided," embraces unknown intermediate terms, since, as yet, not so many remedies have been proved, and those proved, are not so all-embracing, as to enable us to satisfy these expectations in all cases, otherwise, it should not see itself compelled to use mechanical means, after all, in the form of enemata, for one purpose, or of warm drinks with a nauseating admixture of oil, or by irritating the throat with a feather, etc., for another purpose. A laxative will be expelled again by the counter-movements of the organism, in the same manner as an emetic, without any further results following, and it is just Homœopathy that can do those things with the least injury, since the duration of the effect of those substances is known to it from its drug-provings, and it knows how to avail itself of them, while the physiological school, without any point of support, repeatedly interferes according to the causal law, and thus produces harm unconsciously. However, in orthodox Homœopathy, nothing which looks like a drug is allowed to be used for such purposes, except under the penalty of excommunication, because Homœopathy is sworn to *dynamics*, to an idea which had to wander from mechanics into therapeutics, yet by which here quite different things and ideas are understood than there: here (in therapeutics) — forces without objects — catalytic forces, etc.; there (in mechanics) the laws of motion.

The reason why Homœopathy fears to act otherwise than as seems to be dictated by the law of similarity, lies in the desire to maintain the contrast between Allopathy and Homœopathy. In the former, the causal law is, of course, the only leading principle; in the latter, the law of the equality of effect and counter effect. But both are laws of nature, and, to proceed correctly according to them, can include no error; both, however, have their limits, outside of which they can no longer claim validity.

If the *means of nutrition* have nothing more to do than to maintain the resistance of the body against external influences always in a state of vigor, so *remedies* have nothing more to do than to restore the altered, *i. e.*, diseased power of resistance in the whole body or in separate parts, for the means of nutrition only suffice for the maintenance of the physiological power of resistance of the organism. Hence, they are a discovery of instinct, while remedies, on the other hand, are a discovery of the human intellect — especially of Hahnemann's genius.

But, in this connection, it must not be overlooked that, frequently, still other obstacles oppose the influence of the remedy, obstacles which must first be removed, and this is often accomplished by *palliatives*, of which the therapeutics of the physiological school, or Allopathy, consists, according to its maxim, *contraria contrariis curantur*, for it is clear that remedies can never be found by this principle. In fact, no kind of Allopathic treatment unconditionally prevents any disease from relapses and the worst sequelæ: consecutive diseases, which are often much more dangerous than the primary disease itself, for, instead of increasing the resisting force of the body, this is necessarily weakened by every Allopathic cure, so-called. In the same way, in which Homœopathy sometimes uses palliatives in order to remove hindrances to the effects of its remedies, Allopathy or physiological medicine seeks to cure!

Moreover, since Allopathy possesses no remedies, but only palliatives, it is, aided, at the best, only by the reproductive force of the body, to which only a spontaneous cure may be entrusted, and, this, finally, can be nothing more than a fallacious expectation. Hence, in Homœopathy, *laws* prevail, in accordance to which the result may be foretold with certainty, while, in Allopathy, the *contingent* prevails.

The following conditions demand the direct *palliative* relief, which according, at least, to my Homœopathic practice of many years, ought not to be neglected:

1. All pains which are no longer to be overcome according to the law of reciprocal action, but only by substances in their crude form. They find their place, to a great extent, in degenerated organs of work, for example, in large carcinomatous ulcers located in those organs, in incurable hydrothorax, in incurable hypertrophy of the heart, with asthma, etc. Here the duty of the physician is to adopt a directly alleviating and soothing treatment; but the tincture of opium is to be preferred to morphine, whether given by the mouth, or, which is better, in enemata of water, to which, from three to eleven drops of the tincture might be added, the dose being increased to forty drops even.

2. Noxious substances remaining in the intestinal canal must be removed, now by emetics, now by Castor oil, or by the use of the Carlsbad salts, proved by Dr. Porges.

3. The solution of the Iodide of Potassium operates chiefly according to the degree in which it absorbs water, and it absorbs Ozone only in the proportion of $\frac{1}{2}$ — 1 drachm in $\frac{3}{4}$ oz. of water. For this purpose, its action, in Homœopathic doses, is nil.

4. Where the degeneration of the organs is so far advanced that it has led to dropsy, from incurable insufficiency in blood-making, life must be palliatively revived by the so-called diuretics of the physiological school.

5. So, also, in case of phenomena directly to be reached by chemical means, for example, in acidity of the stomach, the Bi-carbonate or Lactate of soda must be given till Bryonia, etc., has completed the cure.

Wherevery a cure has become entirely impossible, we must seek to supply palliative relief, and where this is not practicable, with the molecular substances of Homœopathy, these substances must be used in their massive form.

§. 242.

Here I wish to call attention to several organic substances which seem to be, as regards the organism, effective in their crude state and no other; as, for example, Pepsin, Cochineal, etc. To attenuate such, to seek to give them in minimal or attenuated doses would, in many cases, without question, be an unwise procedure. This assertion will be disputed by Homœopathic dogmatism. But every dogma in a science, to be based upon natural law, blinds, and hence must be avoided. To prove this in a substantial manner, a practical case will the soonest convince the dogmatists, if they have not already fallen into the inflexible absolutism of intellectual senility:

Called one day to a poor patient, whose physician had left him three days before, with the assurance that he would soon get well of himself, I found a young man, nineteen years of age, and of a very vigorous frame. He complained of insufferable abdominal pains at night, for which his physician had frequently bled him, generally and locally, and, for laxative purposes, had given him Chamomilla tea, together with some white drug, while warm poultices were applied to the abdomen. The drug was, as I discovered, a mixture of oil with Gum-Arabic, which had, naturally enough, been used to little purpose; on the contrary, the nocturnal pains had increased to such a degree that the patient awaited the dawn of every day with the greatest longing. But, as little complaint was made during the day, or at the time of the doctor's visit, the doctor, probably, lent but little credit to his story. I must remark, that this doctor was no beginner, but a man of long years of practice, and highly esteemed. The cause of the disease was attributed to catching cold by sleeping in a bar-room, upon straw, in the month of January, after a long walk. The present complaints

were of fleeting stitches in the loins; urging to urinate; pains in the limbs; general lassitude; little appetite; sweetish taste; thirst, and headache in the forehead and temples. Further examination showed a face deeply red, nothing morbid in the chest; pulse 100; abdomen soft; the liver, spleen and bladder healthy. The nightly appearance of these pains alone, led me to think of inflammation of the kidneys, and a deep pressure upon the region of the left kidney, was responded to by a loud scream of pain; the region of the right kidney was also very painful. The urine, for which I now inquired, was of a dark color, had a white sediment an inch deep, over which was a granular layer, half an inch thick, deeply reddened with blood—so that, as regarded the diagnosis of an acute desquamative inflammation of both kidneys, there could be no longer any doubt, and this was subsequently confirmed, by my microscopic examination of both layers, in the first of which I detected urates, while the latter consisted of blood and fibrinous casts.

The therapy of the physiological school, of which this physician was an adherent, had already shown itself unequal to the case.

According to the differential diagnosis of Homœopathy, the case was such as indicated the use of *Coccus cacti*. I let him take five drops of the third attenuation in water, every hour; and the next day I learned that the whole night had been as sleepless, on account of the inexpressible pains, as the previous six had been. Accustomed to find in acute cases, in a few hours after my prescription, some essential improvement at least, I received this news as an indication of the utter inefficiency of this drug. Under the use of a few other remedies, which I also thought indicated, though not so characteristically, the patient at length lost his strength, and the pains became most agonizing. I cast about for aid from the experience of every school, and could, according to the Homœopathic differential diagnosis, find no other of the many remedies indicated than *Cochineal*. This was indicated, also, according to Rademacher. Now, no skepticism, and no dogma, could prevent my procuring *Coccus cacti* in substance from an Allopathic druggist, in form of a powder, a teaspoonful of which was given every hour. My labor was rewarded, as the pains the next night were manifestly less, the night following less still, and, on the third day of the use of the *Coccus cacti*, there was neither blood nor sediment to be found in the urine. The following night he enjoyed some hours of sleep, the first time for eleven days; and the patient was, in a few days, relieved of his pains, his sleeplessness, etc.

How did this happen? Clearly, not only according to the law of the specific relation which existed here between the *Coccus cacti* and

the quality of this inflammation of the kidneys, but also on account of the given quantity of the *Coccus cacti*; and this quantity consists, as does almost the entire insect, of Tyrosine, an organic substance, which, like Pepsine, is seldom used successfully in such cases, when attenuated, and that only in very sensitive subjects, and in a limited range of diseases. This paragraph shows that the use of traditional doses cannot be dogmatically forbidden.

But the main thing is, though given in traditional doses, the drug was given according to the law of similarity, which, to the physician, *in all doubtful cases*, according to its purport, as set forth in the previous paragraphs, *is, and ever must be, the only guiding principle*.

Finally, there is also another method of using drugs, viz., for the purpose of destroying and removing parasites. Helminthiasis belongs to the chapter of *foreign* organisms, living, or capable of life, which have entered our organism.

Now, the purpose of killing and removing such parasites cannot always be attained according to the law of the organic reciprocal action. Hence, in such cases, we cannot always entirely decline a causal treatment; though Homœopathy teaches a number of remedies, which, in many cases, make the expulsive methods superfluous, and, in any case, prevent the parasites from inflicting any evil, or from reproduction.

Thus, then, we must offer the diseased human organism, sometimes, palliative aid, according to the causal law, but as a rule, of course, radical help, according to the law of reciprocal action, and if Homœopathy would seek to treat all cases and every case, simply and solely, according to the law of similarity, it would fall into the same error as Allopathy. Hence these sciences are no contrasts in the sense of opposition, but rather complements of each other.

§. 243.

We must always remember that, in diseases we have nothing before us except either primary chemical changes, which produce physical changes only as results, or, *vice versa*, or, both together, and that, indeed, either a local, or, as in all cases accompanied with fever, and in all chronic cases, a general chemismus, which is not the chemismus of the *specific* form of the organism found within the membranous movable resistances, but, as has been partly shown in previous paragraphs, a chemismus *changed* by combination with substances and effects of the morbid cause; but that we have in this case nothing to do, but to break up this changed chemismus according to the laws of

function of nutrition already laid down, by the introduction of new chemical combinations, and to prevent, where it is possible, local lesions even, dependent upon the membranous resistances.

Though unconsciously to itself, the whole Homœopathic Therapeia rests, nevertheless, upon these chemico-physico-organic laws; its whole language is only to be understood in conformity with them; *under this supposition alone can it use, in most diseases, a single remedy for so great a complexity of properties as are presented by the various forms of disease*, and only under this supposition is an explanation given for the otherwise very wonderful result of its treatment; but at the same time, the reason, also, why I must retain its language.

To oppose to a morbid cause, *only one single* substance as a remedy, is a doctrine which belongs to the oldest principles of Homœopathy.

I shall show that although this doctrine is to be justified under most circumstances, yet not under all, according to the present standpoint of the progress of Homœopathy, both as regards the most rapid, safe, and pleasant result at the sick bed, and the existing laws of the organism, and when I enter upon the proof of this, I am quite conscious that I again offend orthodox Homœopathy. However, every one is quite at liberty to practice according to his best judgment.

It is well known that many Homœopathists give alternate remedies, as they are called; they often give, for instance, against the effect of a single morbid cause, in many diseases, two remedies in hourly or less frequent repetition; for example, Aconite and Belladonna; and, indeed, as far as I know, these two remedies are given most frequently in this manner. What occurs now within the organism?

From §. 114, we learn that, as well after the use of Belladonna as after that of Aconite, thus from two different causes, a phenomenon appears, similar in form, but under very various functional and nutritive reciprocal actions, in various organs, tissues and cells: hence these two remedies, given in succession, may produce various successive motions in the various organs, tissues and cells, without being able to disturb the effect of each other. Moreover, these movements and counter-movements of Aconite and Belladonna, given, for instance, in hourly alternation, cannot extend further than to their initiative effects, and produce no further effects, no inflammations of the tonsils or of the joints. On the contrary, the effect of Belladonna will continue to be directed upon the cells of the blood, that of Aconite upon the serum, that of Belladonna to exciting the function of the venous, that of Acon. to exciting that of the arterial vascular system.

Now, it is well known, that, in the domain of the arterial vascular

system, the processes of oxidation are introduced and carried on, but in the venous, the processes of reduction.

Hence it follows that by the administration of Aconite and Belladonna alternately, an alternation of increased oxidation and reduction takes place, *pari passu*. But the physiological life of the organism consists in nothing else than this alternation—only it occurs, according to §. 48, at one time, *after* definite days, but at another, likewise *within* these days; on each of them, according to §. 25, twice in twenty-four hours: hence it is clear that the administration of Aconite and Belladonna produces an acceleration of the organic change of matter which cannot be produced more rationally, and should we be fettered by a dogma which ventures to forbid us such great conditions of cure?

In this connection, we may further remember that, according to §. 100, the Ozonides act as reducers, where the Antozonides have acted as oxidizers, and so the alternation of many other remedies, in one and the same disease, may be perfectly justified according to natural law.

§. 244.

From an indiscreet opposition to Allopathy, and even without a perfectly clear idea of all that is involved in her own science, orthodox Homœopathy seeks to defend herself with hypotheses.

Thus it assumes, as the first cause of disease, a purely dynamic *depression of the vital force*, and, for the cure of disease, a *curative force of the drug*. Such an assumption, however, is not only illusory and arbitrary, but also superfluous. What is to be understood by vital force, may be found in §§. 18, 23, 27; it is identical with what some have sought to include in the idea of a curative force in general. *The curative force is already present with life, and is nothing separate from it.*

Mechanics, the science which treats of the laws of equilibrium and motion, is divided, as regards its application to the material world, into statics and dynamics, according as its bodies are in a state of equilibrium or in motion. But in the organism, there is neither statics alone, nor dynamics alone. Just as little is our regard to be paid to the *forces of remedies* alone, but also to the substances of the organism, and, at the same time, to those of the morbid matters of the outer world; since definite specific properties inhere in all, the reciprocal action of which we have to study. Even the effects of magnetism

and electricity depend upon their material causes, and are themselves to be perceived as material, by one or the other of our senses.

Finally, what is meant to be expressed by dynamic depression (*Verstimmung*) is not perceptible, either by the art of experiment or that of observation. Dynamic depression, vital force, curative force, are mere empty relative ideas.

The so-called alternate actions, *in the Homœopathic sense*, rest upon quite different suppositions from what is generally thought, when, for example, the so-called Homœopathic alternate action in the results on proving Copper appear: suppression of menstruation, and immediately after, under the same rubric, profuse menstruation; this seems flatly to contradict the causal law, and has again such a paradoxical sound, that it needs a somewhat closer investigation.

In the first place, I must beg leave to *drop the Homœopathic idea of alternate action*, for this is an expression used in natural sciences to denote the law of "the equality of effect and counter-effect," and is thus to be understood. Hence, if we are necessarily governed by the general and customary use of language, in the general sciences of nature and of thought, to avoid ambiguity, then we shall find, in a whole of the organic alternate action, as within our organism, every part active and passive at the same time, and that within the oscillating limits of the equilibrium of motions. §. 23, 24, 49.

Copper, for example, possesses, it is true, specific lines of direction toward the female genitalia, and hence, given, in the same quantity, to *different persons*, or, at remote intervals, to one and the same individual, (if, in the meantime, in any manner, corresponding changes have taken place in the organism,) may regulate those opposite forms of menstrual function in one and the same person. If, for instance, two disease-forms—amenorrhœa in the one, and profuse menstruation in the other case, appear in connection with phenomena which indicate that the organism undergoes a change in its motions, on account of an electro-negative state of the atmosphere; then, although the body, in this instant, inclines to dissolution-forms—the same Copper, given in the same quantity, will restore to its normal state a profuse menstruation as well as a case of amenorrhœa; the former, however, more directly, provided it appears itself as a dissolution-form; the latter, indirectly, if it exists only in connection with another dissolution-form.

Or, to return at the same time to the removal of injurious substances from the organism, I quote here the so-called law of Homœopathic posology, hitherto *generally accepted*, according to which a *smaller* dose will produce a *contrary* effect to a *larger*. If, now, particular affirmative opinions must have the same force conversely, provided

they are to have any at all, then this so-called law should be disturbed by no fact, and meet with no exception. But we find, in this very case with Copper, an exception to this rule, since the very *same* quantity of Copper can cure the so-called opposite functions of the organism.

Certainly every one must have observed, who has occupied himself with the study of Homœopathy, and has begun to put it into practice, that, for example, the third trituration of Sulphur, taken at the dose of a grain twice a day, or of *Calcarea carbonica*, has surprised him sometimes with loose stools quite unexpectedly, and which he had no intention of producing.

But first it must be ascertained what is meant by "*opposite*;" for the relative ideas, "greater" or "smaller" dose, are quite too indefinite. However, "*opposite*," by itself, is quite as flexible a relative idea as "similar."

Since, however, *like* is what is *similar* as to cause or essence, what corresponds in form, so here, *opposite* is that which is found not to correspond, either as regards form or cause. Only a cause should not be confounded with conditions.

Now, there can thus be forms of the *reciprocal action of the organism, according to natural law*, with the substances of the outer world, which, as in case of copper, appear to stand in contradiction with that of general Posology. That, however, is not quite the case; because the wording of it is not precise enough; and, conversely taken, often proves itself correct also.

Where, for instance, Sulphur, in minimal dose, produces diarrhœa, there it must have been used in a converse relation to the wording of that Posology; for, according to that Posology, it should, in minimal doses, merely check a diarrhœa; since, in larger doses, it can produce it. But, in fact, even in the minimal dose of the third centesimal trituration, it causes diarrhœa; or, *Calcarea carb.* must produce the same in a larger dose, since, in smaller, in a minimal dose, it checks diarrhœa. But that, in fact, it does not do in a larger dose; there it operates, as the school says, as an absorbent, thus purely chemically.

One may see into what endless confusions one throws himself, by the extravagant use of the ideas of relation.

If we analyze the facts, we shall find none much different from those which occur to Allopathists, and which surprise them, if no vomiting is observed after an emetic, but diarrhœa, or when a laxative, instead of purging, vomits.

All these facts can never be explained by the assumption of the *Homœopathic alternate action*. They appear under various doses of a

drug, do not depend merely upon the quantity of the dose, and are nothing but the consequence of the same, in connection with the various specific qualities of bodily constitutions.

§. 245.

Before I conclude with these questions, I must remark that there is still another case, which is incorrectly brought under the generalization of the Homœopathie alternate action and posology.

Why so-called smaller doses sometimes act oppositely to larger, depends often, but not always, upon the above-mentioned relations.

With the results of the proving of Aconite, for instance, the case is quite different. Here, a contrast occurs in the difference between minimal and traditional, or smaller and larger doses, which can be explained, neither by the quantity or quality of a substance, nor by a specific interchange of matter of an individual, because the effects of both doses, in case of Aconite, are *different from each other*, as regards matter itself. Clinical experiences agree with those of Dr. Reil, in every case, "that the more the *depressing* effects upon the nervous system manifest themselves, the richer is the preparation used in Aconitine; while those of irritation from the acrid matter, fall into the back-ground. In this case, especially, symptoms in the domain of the Trigemini show themselves more promptly and more manifestly, and diuresis is also evidently increased."

Thus, we have here *two substances* united in Aconite which produce the contrast between irritation and depression, and thus again there is no appearance of contrast, in the general sense, according to the Homœopathie posology; for, of these two substances, the Aconite, as the attenuation progresses, loses first the extractive matter, while the Aconitine continues longer. But it is also *no alternate effect*, nor any *secondary effect*, if, in one individual, the phenomena of the Aconitine appear first, while, in the other, those of the extractive matter.

Thus we have, by no means, been able to observe a uniformity of phenomena, which deserves a particular generalizing designation, least of all, that of an *alternate effect*, and we have found no particular law for it, from which abstractions could be drawn. Hence it would be absurd, sustained, for example, by that posology, to maintain, *a priori*, that because Digitalis, in a traditional dose, acts as a diuretic, it must, therefore, in a minimal dose, check an increased diuresis; for Digitalis does not do that at all, and for this very reason, because, to use Jolly's language, its co-efficient of contraction would much sooner become equal to *zero*, as is the case with many other

substances; and since, on this point, no experiments, either physical or pathological, have been instituted for a sufficient deductive confirmation, such assertions amount to nothing.

Thus we discover a number of fallacies, because so frequently the significance of words is improperly chosen, and uniformities, in separates or particulars, are extended over a constant course of events, as if they were generally applicable and equal to natural laws.

Opposite, then, in the sense of that posology, is to be referred to the quantity and quality of the cause, and, at the same time, to the form of the organic counter-effect. However, a direct contrast is not thereby expressed in *every* case, but only a *difference*. Thus, of course, Sulphur for example, Calcarea, etc., operate according to the dose, now constipating, now relaxing. But the latter effect, in case of Sulphur extends with some individuals, from the greater, or traditional dose, to the smaller or minimal, and frequently ends, not before the third trituration, or even later, from which point onward, the first effect then appears. The designations, traditional, minimal, larger, smaller dose, serve, indeed, right well to keep alive the old quarrels, and to retain cherished phrases, but they are not based on science, since the limit appears now in the traditional dose, as with Rheum; now only in the minimal, as with Sulphur; now only a part of the so-called contrast exists, as with Calcarea; now the ground of contrast rests in two different substances, in one and the same body, as in case of Aconite, etc., etc., and these limits, where they are not yet found out empirically, have yet to be found out, before one can undertake to establish general laws thereupon.

All these relations rest upon no other laws, than upon the difference of the different effects of bodies, according to their composite or free state in relation to the movements of the organism. With what part, in measure or weight, of its quantity in relation to the organism, a substance seems to be changed from the composite state into the free, Homœopathy has already determined as regards many substances; where this has not been done, no assumption of a Homœopathic alternate action helps the matter. The wording of the Homœopathic posology has no other ground than the empirical change, wrought in the efficiency of substances, denoted in the physiological school by the "*refracta dosis*." For Rheum, Tart. emet. and Ipecac, this relation has long been known to the physiological school as an unexplained fact. But it does not *believe* that it can happen also with other substances. The Homœopathic provings discovered something similar in hundreds of other substances, and Homœopathy has, even in this,

far outstripped that school in knowledge. Only its designation thereof, is as obscure as it was in the days of Hahnemann.

We know that every part of an organism forms again a unit for itself. Not even the organic cell is simple. It consists of a nucleus, of the fluid cell-contents and the cell-membrane, and must, besides this, have, for its support, a surrounding, from which it separates itself, to which it spontaneously makes resistance, and from which, according to the laws of its specification, it attracts chemical substances, which it uses, and into which surrounding it throws off what it no more needs. Hence, it is not necessary to suppose a vital force, or even a *chemical force*, or it is necessary for those only, who, in their inquiries into nature, cannot get rid of the idea of especial forces. The specific-chemical properties of bodies are, and remain exactly the same, within the organism as they are without it, but these bodies undergo, under those local conditions, and those specific motions of each one of the organic parts, the most manifold separations and combinations. In these motions there can naturally no difference be discerned, except the necessary one which arises from the specification of substances and that of the organic forms with their movable membranous resistances.

If, now, the cell has experienced a change in its nucleus, and is sick, then this change can be cured through the medium of the contents of the cell; if these are diseased, they may be cured through the medium of the membrane; if the membrane is diseased, it may be cured through the medium of its surroundings.

Every drug, we know further, can only be attracted by special parts of the organism, and repulsed by others, and that only in definite quantities.

Now the question comes up again, is the drug in hand a functional or nutritive means? and, then, what counter-effect of the organism is its *first effect*; *further, of what counter-effect is this first effect the new cause, and how do these (alternate) reciprocal causalities follow one another?* If this substance were a function-remedy, and it were given for a longer time, or in increasing quantities, then we find that, producing always the same influences upon the same parts, it always, in the parts earliest affected, very soon causes changes of nutrition — and thus the reciprocal causalities, which the drug-provings teach us, accumulate. If the substance were a nutrition-remedy, then it nourishes first the organic parts specifically corresponding to it, and when these are over-satiated, they soon produce again changed functions in their adjacent surroundings, which are also able to propagate themselves. But I have already spoken of this in previous paragraphs.

§. 246.

Our subject is still the idea of the *primary Homœopathic effect*, concerning which the following occurs to me, in addition to what has been already mentioned.

We know, for instance, from §. 114, that Belladonna, taken three or four times a day, in doses of one-eighth of a grain, by a healthy person, *first* conveys its motions to the corpuscles of the blood, by which their interchange of substance is accelerated. In consequence of this, the dead corpuscles of the blood accumulate in the liver, and this appears as the *second* counter-movement. The eye is drawn somewhat later into the circle of these movements. If we have, however, an inflammation of the eyes before us, in a human organism otherwise healthy, and if it is of that specific quality which indicates the use of Belladonna, then the Belladonna, without touching the life of the blood, calls forth the *first* counter-movements in the diseased eye, *provided* it is in an appropriate Homœopathic attenuation, *i. e.*, given in a developed condition. Here we have as *primary effect*, that which there was the *fourth*.

But should this inflammation of the eyes occur in company with a form of disease in which the blood life also, and the throat, had given at the same time an indication for Belladonna, then all these organic parts must naturally *experience* the influence of the Belladonna, *at the same time, as a primary effect*.

Thus the law of similarity, I repeat it, in reality has no bearing upon the action of the drug itself, but refers solely to the indication, according to which, in the same organ, functions are produced similar to those brought about by the morbid cause, *i. e.*, functions in the same organ, which, however, proceed from a different cause; hence are produced by a kind of action different from that of the morbid cause.

The physiological school, for instance, enumerates Aconite and Citric acid among the diuretics; but, in Homœopathy, it is known that the latter counteracts the effect of the Aconite. Wine, also, is a diuretic, as well as Digitalis; but the latter removes the diuretic effect of Wine, as well as that of Aconite. Of such examples there are many more; but, from these few, it is clear that all these so-called diuretics are *only similar according to form, i. e.*, they produce, indeed, an increased secretion of urine; but, because their effects arise from various causes and conditions, they are opposite, even antidotal, and such surely may be called opposite (contrary) effects.

It is clear, again, from these experiments, that the Homœopathic indication flows indeed, from a simile, for the purpose of *synthetic* comparison; but the effect, from a *contrarium contrariis*; and that these two affirmations, in themselves empty relative ideas, are really of the same value, and do not exclude, but complete, each other. One needs but to separate them and to connect them with facts according to natural laws.

It is only by leaving these circumstances out of consideration, that the hypotheses of Homœopathic alternate action, primary and secondary effects, and the contrast between the *simile* and the *contrarium*, could ever have originated.

If one proceeds partially from the maxim of the *contrarium*, as physiological medicine does, then I can show, from the same examples, the injurious influences thereof, because the Belladonna ever remains Belladonna, and the human organism is likewise the same as regards the two-fold specification, as well as regards the form of their reciprocal effects. Hence, this example may serve for all, since, with regard to all, the same laws govern, but those laws must be observed also by art, in order that the experiment may be easily repeated.

If an Allopath, for example, who has heard of a cure of an inflammation of the eyes, by a Homœopath, should give, in the first instance, one-eighth of a grain, three or four times a day, he would, at first, as improvement set in, observe the same result, but, as soon as the life of the blood is affected by the quantity of the Belladonna in its usual state, *i. e.* its molecules being aggregated, then this Belladonna affection of the blood, by its injurious reaction upon the improved eye, must make the eye worse again. Thus, he not only deprives himself of his *good result*, but he sees, also, in his patient, the injurious effect of his one-sided view, without knowing the cause.

The result of this treatment, in the second case, must naturally be yet more injurious. That is of no consequence, however, for, to him who assumes to himself the predicate "physiological," everything, even the most hurtful, is allowed, if he only does not depart from the palpable causal law; to the Homœopath, however, his treatment, according to the law of the equality of the effect and counter-effect, is forbidden.

Yet we may discriminate between *permanent* and *transient* effects, since, in all Homœopathic undertakings, the only object is the restitution of changed relations of function or nutrition. The first are nutritive and self-evident; the last functional, and, to wait for functional *secondary effects*, or only to seek to gain such, is unpractical. because we do not eat only for the sake of the excretions, but also and

chiefly for the sake of supporting life, and do not drink merely to form urine, but first to quench our thirst. To give drugs in the sense of this allowable comparison, can never be indicated according to natural laws.

If we thus follow up these occurrences, by the clue of the laws of nature, then we shall find that the so-called Homœopathic alternate and secondary effects may be, and are, frequently confounded with each other, but that both hypotheses are included in the clear idea of the various forms of the natural alternate effect, and, hence should be rejected as superfluous, for, as a general rule, *we need to know, in this relation, nothing but the specific forms of the whole of the reciprocal effect of the drug, with the organism as regards time and space*, in which all these distinctions, for each separate substance, must be given at any rate and in an exact manner.

Cases like diarrhœa, from purgatives; secondary effect. Constipation, or heat after a sensation of cold in the hand previously immersed in cold water, or depression after previous irritation from Wine, Opium, etc., are *natural* results from the physiological law of proportional oscillation, §§. 108, 109, 110, occurrences of succession, *not of change*; for what *causes* diarrhœa is not, at the same time, the cause of the constipation directly ensuing thereupon, and the latter is only the result of the necessary conditions of the existence of the organism.

When Homœopathy enumerated such succession of events as secondary effects of drugs, as causes of cures, it fell into the same fallacy as did physiological medicine, with its "physiological types," in order to explain by them pathological processes.

In so doing, Homœopathy identified, thus, two processes, from quite different causes and conditions, and from quite different domains.

The hand in cold water is cold at first, *i. e.*, the function of the capillary vessels is repressed, while, at the same time, that of the cutaneous nerves finds itself in a state of the greatest tension, which may approach the oscillatory minimum of its function, and only waits for the conditions of the oscillatory counter-movements, in order again to be changed into living force. This happens, also, with natural necessity, as soon as that possible minimum of function and maximum of tension is reached, and not over passed, and freezing is produced. In that case, the equivalent counter-movement, in form of congestion and development of heat, manifests itself, but not *as the secondary effect* of the cold, but because *the organism*, as soon as a certain degree of tension has been reached by one of its parts, *independently* and necessarily converts the same into living force, as long as it is not deprived of the necessary conditions for this purpose, in which case *changes*

arise in the relations of function or nutrition, that is to say, pathological conditions, and arise, indeed, as consequences of the morbid cause, which, in this case, would be the cold.

The so-called Homœopathic secondary symptoms are, hence, as has been remarked, never useful for the purposes of cures by art; they belong, according to their natures, to the cases of spontaneous cures, and hence should not have been produced at all. *Homœopathic primary effects, alternate effects, are hence no categorical ideas, but hypothetical, just because they are ideas of relation, and of themselves have no value.*

§. 247.

To deeply rooted prejudices, or, to an orthodox dogmatist of the physiological school, it may seem incomprehensible still, that a disease could ever be cured with a *single* remedy. But, whoever is capable of rightly comprehending §. 243, will ask no further question upon the subject.

On the contrary, the Homœopathic dogmatism raves against all *external* remedies. We know, very well, that morbid substances as well as curative substances, in specifically different directions, produce motions and counter-motions, and it is known to every physician that, in certain periods of a man's life, especially in the later, many functions are so much impaired, that we can not urge them, without injury to others. Why should it not be permitted to art, according to the same natural conditions, to supply this want in another manner, provided it can be done without injury and with decided benefit? No part of the organism can be used more beneficially, according to these rules, than the cutaneous surface. In no respects is such treatment to be conducted according to that *principle of the physiological school, to make healthy parts sick, that thereby the sick parts may more readily relieve themselves.* This principle, which forms the invention of those physicians who cannot elevate themselves above mere quackery, is that which Hahnemann exposed, and which is known by the motto *contraria contrariis*. It leads to the most easily learned method of treatment, which any one can attempt without racking his brains. They sin thus, to be sure, against nihilism, in favor of which they declare themselves to be, by their theory, but such things have to be done, at any rate, *nolens volens*. But to follow that maxim is not necessary, even for this purpose; one can do it according to the law of similia in cases where mere mechanical aid is not required. If, for example, a patient has suffered from a chronic exanthem, and,

after the retrocession of this, from whatever cause, chronic affections of the chest, cough, purulent expectoration, emaciation, difficulty of breathing present themselves, then I can, with the *totality of the disease* in view, according to the principle of similarity, find no treatment more prompt than to provoke an affection of the skin, similar in form, by external means; and this frequently is done far more rapidly than by remedies given internally for this purpose. It is very true that this should not be accomplished by drugs which are not indicated; for instance, in given cases, by Tart. emet., for its influence does not stop with its action upon the cutaneous surface, as the remedy is absorbed. But who can cry out against setons and the like? Many patients have been under my care, who, for years, have worn a seton on the arm, and since wearing it, have noticed nothing of their former complaints, blenorrhœa pulmonum, deafness, amblyopia and the like. It never could have occurred to me to check such functional counter-movements by removing the setons, till the secondary phenomena, which previously and still accompanied these complaints, had been entirely removed by the internal use of proper remedies, and it was thereby manifest that the entire interchange of substance, the alteration of which had produced these very phenomena, was removed.

The most recent result which Homœopathy has accomplished in this direction, consists in the external use of fuming Nitric acid, in case of felons, by Dr. Hirsch, in Prague. The pain disappears almost instantaneously, and the whole process of inflammation is thereby checked. But a few cautions are to be observed in this connection. For example, open sores are not to be touched with the acid, but only inflamed spots. If there should be some burning, the finger may be dipped in water, whereupon the burning stops at once, while the pain from inflammation does not return. It is self-evident that the pus already accumulated there must have been first evacuated. Cellular tissue destroyed by mortification, clots of pus, etc., after what we have mentioned has been done, have to be removed by baths, consisting of about twelve ounces of water, to which are added twelve or fifteen drops of a saturated solution of Caustic potash, which may be used for fifteen minutes or so two or three times a day.

But there is also a disease which, for every external treatment, is a *no!i me tangere*—that is, the Carbuncle. Its extension, and, indeed, its progress to mortification, can only be prevented by Arnica; and if this is given every two hours, for only two or three days, a rapid recovery takes place at once; while, externally, nothing is necessary, unless it be a little cold-cream dressing.

How many men die every year in consequence of the Allopathic mistreatment of carbuncle, and from prejudice of their physicians against the doctrines of Homœopathy! But if judges do not recognize ignorance of a law as any justification of crime, why is it permitted to professors, and to their disciples who swear by them, to sacrifice human life, on account of an *intentional want of* knowledge of Homœopathy?

Cases of this kind are so numerous and clear that they need no further exposition.

§. 248.

I have yet another discovery of Homœopathy to mention, which has found its complementary confirmation in physics.

Mute and perplexed, and even annoyed, the physician of the physiological school stands before his patient, when he complains to him that he feels better or worse in damp weather than in dry; or, when another complains that he has more or less pain, etc., with an east or north wind, and that all the same whether it rains or is dry; or, if a third assures him that he feels better in the morning and worse in the evening, or *vice versa*; while another can bear no motion, and yet another no rest; some feel worse in warm, and others in cold weather, etc.

But, from 4 A. M. — according to Prof. Horn, from 3.30 — to 10.30 A. M., the intensity of the atmospheric electricity increases, and with it, proportionally, that of the magnetism of the earth, and, from that time forward, it declines *at the same time* with the number of our expirations and strokes of the pulse, whether in health or sickness.

For example, at about 3.30 A. M., there are about thirty-six oscillations to the minute of the hourly variations of the electrical intensity; at 10.30 A. M., there are sixty-four, etc. If, now, the number of these oscillations diminishes from four to eight in the minute, then changeable weather ensues; after a diminution of from eight to twelve oscillations, there is rain or a thunder storm. A decrease of from twelve to thirty-two oscillations is followed by a land-rain, a violent thunder storm, a tempest or an earthquake. Under a normal number of these oscillations of the intensity of the electricity and a gradual sinking and rising of from four to four oscillations, the air is electro-positive, the wind blows from east or north, all the same, whether it rains or not, whether it is warm or cold — the air is the richer in ozone, the longer such a condition continues.

Frequently repeated falling of the intensity of electricity from eight to twenty-eight oscillations in the minute, with a rapid return to the

normal number of oscillations, when long continued, is accompanied with opposite phenomena, those of *negative* electricity of the air, with south or west winds. During the year, finally, the maximal intensity is attained in May, June, July and August.

With the *decrease* of all these intensities of the electricity, occurring at various times of the day and the year, our pulmonary and cutaneous respiratory motions *diminish in frequency*; at the same time, the blood becomes *richer in carbon*, the capillaries relax, perspiration sets in, which thus has not for its cause an exalted capillary activity, as, for example, under violent bodily exercise. The blood becomes thus, more electro-positive, consequently more and more homogeneous with the polarity of the nervous system; the reciprocal motions and counter-motions between the blood-life and the nerve-life, thus become weakened, and so the further *simultaneous* results are transferred to the musculature and the whole interchange of substance, as well as to the mind and spirit. (Geist and Gemüth.)

Just the opposite takes place under an *elevation* of the intensities of electricity.

These changes of the organic functions, according to the times of the day and year, according to the various changes of weather, etc., were, however, known to Homœopathy a long time ago, from its drug-provings, and because, by means of these very same drug-provings, it discovered the kind of reflex influence of these telluric and atmospheric reciprocal motions upon the organism, so it learned thereby, *at the same time, the remedy* for diseases, having the corresponding symptoms of improvement and aggravation.

Homœopathy knows still more which is incomprehensible to the physiological school, though, at the same time, naturally demonstrated by those physiological experiments and their synthesis with the drug-provings. From this synthesis it becomes manifest why, in many diseases, Ambra, for example, Nux vomica, etc., cannot be given at night, because, though otherwise properly indicated, they *aggravate* just those very phenomena of disease which they should relieve, and which, when given during the day, they really do relieve and cure; why, further, from such combinations, effects of the drug with the causes of disease, or with specific constitutions of the body, arise, which Homœopathy has designated as *drug-aggravations from remedies*, mere paradoxes for the physiological school, nevertheless realities founded upon natural laws.

On the contrary, Homœopathy does *not* know that Belladonna and Stramonium, for example, when they are mingled with the blood, preserve its red color and take away its tendency to putrefaction,

though it does know that the same Belladonna is curative in poisonings with animal substances.

Further, from this physico-chemical property of Belladonna, are explained still other phenomena, which it produces in the organism, and which are known to Homœopathy from its drug-provings. Thus, we learn, from the provings of Belladonna, that it is suitable chiefly for full-blooded, plethoric, scrofulous, irritable individuals disposed to affections of the brain, especially congestions, and spasms. But if we know at the same time that physico-chemical property of Belladonna, all these symptoms are not *only explained* to us in this way *also*, but, at the same time, it indicates to us more simply the specific quality of those symptoms, than if, to obtain the same knowledge, we were laboriously to study and explain the entire result of the drug-provings with Belladonna, in a physiological and pathological sense. Homœopathy knows very well that by fright, terror, anger, grief, etc., the exhalation of Carbonic acid is always hindered, and hence knows, together with its synthetic comparison, that Belladonna when indicated, cures these complaints and why it does so; but does not that physico-chemical property of Belladonna supply a most desirable completion of the provings?

We see clearly that the Homœopathic Therapy and Pathology have their *law books* which have originated from drug-provings and their verification; provings on the sick, a subject upon which, independent monographs begin to appear in great perfection, as the proving of Mercury by Dr. Buchner, that of Aconite by Dr. Reil, that of Digitalis by Dr. Bæhr, that of Phosphorus by Dr. Sorge.

§. 249.

I will now adduce a practical case, and at the same time an example of the so-called primary, secondary, and alternate action.

While yet a beginner in the study of Homœopathy, a study reaching far into natural sciences, and without any instructor. I cherished the conviction that, as I was wont to see it in my Alma Mater the physiological school, one could flourish in Homœopathy, also, with the least possible outlay of thought. Thus I at first naturally adhered to the Homœopathic phraseology, till occurrences at the sick-bed taught me otherwise.

A young man twenty-five years of age came to me and complained of an increasing loss of sight. Noticing at a glance that he had a cataract of the left eye, he stated that he had to ascribe this disease to frequent attacks of inflammation of the eyes, since, being a hostler,

every time he cleaned his horses, the dust always produced a burning in his eyes, which continued to increase till the pain obliged him to quit the employment, and his physician had hence often treated him for inflammation of the eyes and always relieved him. He still lived, however, in an ever new hope, that his eyes would become accustomed to the work, and always returned indefatigably and scarcely improved, to the same work, till he was now obliged, by weakness of one of the eyes, to give it up entirely. In other respects, I found him well and hearty. Behind the capsule of the lens of that eye, there was, according to the most careful examination, a homogeneous cloudiness in the lens itself, which was demonstrated beyond any doubt, by the evident phenomena, the deeper lying shade of the pupillary border, etc.

Since Homœopathy, so I thought to myself, as it asserts, cures the chemical changes of the lens in the form of a cataract, though it is acknowledged by the physiological school to be *incurable*, and considered amenable to operative surgery only, the youth of this man would present the most favorable conditions for this purpose; so I gave him, according to Homœopathic custom, *Calcaria carbonica*, the 5th decimal trituration, a grain at a dose, and that to be taken, too, every hour, being as yet utterly wrapped up in my conclusions according to the causal law, that "much helps much." The observance of a supporting diet could not be promised, since his way of living utterly forbade it. Yet the patient promised to present himself every eight days for inspection. After eight days I observed a marked change; the opacity, before homogeneous, had separated itself into spots and streaks like mother-of-pearl. If the whole prescription, from the very beginning, both as to quantity and repetition of the dose, had not been too strong for the end in view, this change should have earnestly called upon me, at any rate, not to give, by the continuance of the drug, any new impulse to the counter-movements of the organism, excited by the movements of the *Calcaria*. But, then, I had no inkling of the fact that, here, changes in the functions and nutritive relations of the eye prevailed, which, *according to necessity, are only to be restored*, and not *resisted*. Nevertheless, being still in the clutches of the doctrines of my school, I now advised him to take the remedy all the oftener, instead of discontinuing it at once. After another fourteen days, I could no longer deceive myself in the observation, that the change in the cataract last noticed had undergone a new change, for the opacity showed itself equally distributed again, and, examination with the ophthalmoscope convinced me that this opacity now had its seat in the capsule of the lens, also. Remembering the general therapeutic precepts

of my school, I now deemed it necessary to increase the dose at once, believing, as I did, that this manifest aggravation should be attributed to the unavoidable and injurious circumstances in which the patient lived; any other supposition seeming impossible to me. I hoped, by increasing the dose, at least to restore the previous state of things. After the lapse of fourteen days more, however, I found that not only was I deceived in my expectation, but that the opacity of the capsule of the lens was as complete, as equally distributed, and as characteristic as we are wont to find it in a cataract ready for operation. My hope of a cure was thus destroyed, and I prepared my patient, according to his own wish, for an operation which was to take place in the course of a month, if a marked improvement did not set in within this period, during which time, however, he was to take no more powders; for I already surmised the error which I had committed, though it was not my fault, but that of my teachers. At the end of this time, I performed the operation as I am accustomed to perform it, when there are no urgent counter-indications, with a straight keratonyxis-needle, through the middle of the cornea. Having reached the capsule of the lens with this needle, in order to divide it, it seemed as if I had struck upon some object having the resistance of horn; after many attempts to cut through it crucially, I was obliged to desist. However, having commenced the operation, I was loth to give it up so readily, and tried now to pierce, at least, the middle of the capsule with the needle. But in vain; the needle bent so under the cutting pressure which was made upon it, that it certainly would have broken under greater force, and I found myself compelled to give up the operation. After the puncture in the cornea was healed, I undertook the same operation with a stronger straight sclerotic-onyxis-needle, since there was no indication for the cataract knife. The cutting pressure with it upon the capsule of the lens, caused so great a depression of the capsule backwards, and met with such a great resistance, as I had never seen, or read of, in the practice of the most celebrated oculists. However, the needle penetrated the capsule at last, but this was hardly done, when, simultaneously, the whole anterior chamber of the eye was filled by the discharge of the well known white, opaque, thick fluid, by reason of which, the point of the needle was no longer visible, and I was obliged to consider the operation at an end.

Since my preparations as far as the individual to be operated upon is concerned, consist in nothing else than the exhibition of a few drops of Arnica tincture in water the day before, no vulnerary fever or any other injurious result followed, as is frequently the case

after such operations; and, moreover, since even after the operation I give nothing but Arnica third, three or four times a day, the wound healed very readily. The absorption of the fluid discharged into the anterior chamber was complete in three days, and allowed me to see the floating remnants of the torn capsule of the lens, some of which lay in the anterior chamber, the remaining in the posterior; both were absorbed after a few weeks, without any accident.

Three events are prominent here: 1. The changes of the lens and its capsule rapidly succeeding one another. 2nd. The resistance of the capsule of the lens; and, 3rd. The unusually rapid absorption of the discharged liquid, and the lento-capsular remnants.

On account of his lack of the necessary chemico-physiological knowledge, we cannot speak, with a physician of the physiological school, upon such events, however unusual they may seem to him, or, as he would express it, wonderful and fabulous. Yet every one who has devoted himself to the comprehensive study of Homœopathy, theoretically and practically, will recognize the cause of these events in the effect of the *Calcarea carb.* and *Arnica*, and, according to the previous paragraphs, can determine what might here be called the primary, secondary, and so-called Homœopathic alternate effects, but this would have no influence upon the indication, if the cause of these effects were not previously known by the results of drug provings.

As an evidence that all these arbitrary would-be explanations about primary, secondary and alternate effects are only useless generalizations, which make the (real) explanation of facts more distant only; as a proof, further, that, not the quantity merely of a substance given for a curative purpose, can be the final momentum for deciding upon the modality of its efficiency, but simply and solely the quality in relation to the possibilities of diosmotic motions of the qualities and quantities of substances and tissues of the organism, specifically corresponding to the quality of the drug, I adduce an experimental example taken from the fourth edition of the *Chemical Letters* (Vol. II., p. 126) of Liebig, who may here serve as a pole-star to the enemies of drug-provings upon the healthy, and to physiologists also.

“If one, before breakfast, takes, every ten minutes, a glass of common spring water, the percentage of salt in which is far less than that of the blood, then, soon after drinking the second glass, reckoned at four ounces, a quantity of colored urine is passed, whose volume is very near that of the first glass of water, and if, in this manner, twenty glasses are taken, one will have nineteen passages of water, the last of which will be nearly colorless and will contain but a little more salt than the spring water.”

"If the same experiment is made with spring water, to which about as much common salt has been added as the blood contains (three-fourths of one per cent.), then we observe urinal discharges differing in no way from the usual discharges; it is hardly possible to drink more than three glasses of this water; a sensation of fullness, pressure and heaviness in the stomach indicate that water which contains a quantity of salt equal to that in the blood, needs a far longer time for its absorption into the capillaries."

"If, finally, one takes salt water, which contains rather more salt than the blood, then just the opposite of absorption takes place; viz., purging."

Thus, as is clearly seen, the absorbing power of the capillaries, for water, is changed according to the proportion of salt which the water contains; if this is less than that of the blood, then it is taken up with greater rapidity; with an equal quantity of salt, an equilibrium is maintained; if the water contains more salt than the blood does, then this salt water is not discharged through the kidneys, as is the water poor in salt, but by the bowels."

I cannot recall, in all the current literature, a more beautiful example, capable of demonstrating more convincingly my experiences, as I have here laid them down; it contains a part of the diosmotic motions which the common salt, in various degrees of concentration, produces with parts of the organism. And thus we find in Homœopathy not only a molecular pathology, made ready to our hand, but also a molecular therapeutics corresponding thereto, as soon as we dispense with antiquated phrases. If one wishes to speak of primary and secondary effects, or of the contrast between small and large doses, then this example shows also that it never can be done in a general way, but that every time the special case and the substance used must be stated.

§. 250.

I tarry a moment longer upon cataract, in order to show the relation of chemistry to therapeutics in still another respect, and, for this purpose, this disease offers the most suitable object, on account of its ready accessibility to the art of observation.

Even in Hahnemann's time, drug provings showed that the following substances of the outer world produced opacity of the lens and its capsule; or, at all events, dimness of vision, which could only arise from the periphery of these media of the eyes; viz., Ammon. mur., Calcarea carb., Kali causticum, Magnesia carb., Phosphorus, Sulphur., Nitric ac., Natrum mur., carbonicum, and sulphuricum, Kali

carbon, Silicea, Cannabis, Conium, Belladonna, Euphrasia, Pulsatilla, Opium, and of these, cures of cataract have been effected by Cannabis, Kali causticum, Conium, Euphrasia, Belladonna, Opium, Calcarea carb., Magnesia carb., Silicea, Sulph., Phosphorus, Ammon. mur., Acidum nitr., Pulsatilla.

Without any knowledge of all this, Chemistry subsequently discovered that the crystalline lens, with its albumen and globuline, contains metallo-chlorides, the sulphate of soda, the phosphate of potash, the phosphate of lime, the carbonate of potash, the ammonio-phosphate of soda and lactic acid, while the vitreous body contains sulphate of potash, the phosphate of lime and magnesia, the phosphate of the oxide of iron, the chloride of soda, the chloride of potash and lime.

Now, although up to the present day, Homœopathy, even, has *taken no notice* of these chemical results, yet there is opened to us, by these two results, that of the Homœopathic therapeutics, and that of chemistry, the deepest insight into the pathological, as well as therapeutical, movements of the organism in the origin and cure of cataract, and this, in a manner not dreamed of by the schools.

For if, on the one hand, we know the fact that cures have been accomplished by these substances; if it is thereby put beyond all doubt, that the formation of cataract must be subjected to the most manifold conditions, and that the quality of the cataract itself may be of the most varied; then chemistry, on the other hand, explains to us the possibility of its occurrence.

We know, for example, that the lactic acid of the globulin is combined with its alkalies. If, now, these relative proportions are disturbed by the addition of an excess of water, then the fluid *becomes opaque*. For, the globulin or albumen of the lens, being freed from its alkalies, by the surplus of the acid, is then only all the more held in a state of solution by its salts; but these will, by attenuation, lose their dissolving power and globulin or albumen will be excreted, and, in this manner, another specific *opacity* of the lens is produced.

If we, finally, take into consideration the fact that experiments have demonstrated, in cataractic lenses, great quantities of earthy phosphates and cholesterine, then the Homœopathic cure of these various qualities of opacities of the lens, becomes intelligible in a chemical respect also.

The How and Whereby, the relation of those drugs and the necessity of those cures, however, follow clearly from the laws previously discussed, according to which the Homœopathic therapeutics operates, and especially from drug provings.

Had we, for example, a cataract to cure in a constitution which, in its form, resembles the proving of Calcarea carb., then we could not

well be in doubt as regards the indication of the drug, and so forth, as already explained.

From this, many more conclusions may be drawn as regards the value of Chemistry for Homœopathy.

In the first place, Chemistry is not able to explain to us, the effect of any vegetable substance upon cataract.

Then, again, Chemistry alone, never will help us to an *indication* for the cure of cataract with any of the substances which it has discovered.

Furthermore, neither physiology, nor the pathology of physiological medicine will ever announce, *a priori*, the chemical properties of a cataract which is to be cured, hence, for these reasons also, *no indication* for any remedy.

All these questions, Homœopathy answers *synthetically*, in a manner worthy of admiration, similar to that of a practiced artist, who, from a row of pictures, to all of which the sign manual of Raphael, for instance, had been given, in most deceptive similarity, would diagnosticate with certainty, not from these signs appended to all the pictures, but from the general character of each picture, from its specific form, that this is a Raphael, another a Rubens, another a Van Dyke, etc.

But, from this example of cataract, we can also obtain another view, interesting to general science.

As in all pathological processes, so also in cataract, we have simply and solely to do with an injurious plus or minus, and thus also, in every cure, we have to do with the supply of that minus and the removal of that plus. For this end, the laws in their general bearing, truly enough, can be found in Homœopathy, but by far too rarely, those with regard to special cases.

Thus, in fact, there is a kind of cataract which is cured by Siliceous earth, though chemistry does not mention this substance as a constituent of the lens or its capsule. Nevertheless, in view of that curative result, it may be affirmed, with the precision based upon natural laws, that Siliceous earth *must* stand either in a functional or nutritive relation to the crystalline lens. Thus the question of the physician to chemistry: whether Siliceous earth be present in the lens or not, would arise *post festum* only, and without detracting, in any way, from the well-established curative result. Afterwards, by way of supplement, *i. e.*, based upon the Homœopathic curative result, the question would come up to Physiology, in what functional relation, Siliceous earth would be of influence in the cure of cataracts, if this substance were not found by Chemistry in the crystalline lens of the

eye, and to Pathology, under what conditions, an opacity of the lens would be produced, which is curable by Siliceous earth?

Such questions, preceded by a deductively confirmed fact, as the curing of cataract by Siliceous earth, and only such, offer leading principles to further chemical, physiological, and pathological inquiries in the interest of Therapeutics; such questions avoid the useless experiments at random, and of these there would be such a number, that these three doctrines together would have plenty to do all the time.

From such an elaboration of therapeutical questions, however, there would clearly arise a harmonious effort, which, in the shortest time, would bring forth the greatest results, worthy to be enrolled among the great discoveries of our century.

It is obvious, that Chemistry, as often as it discovered a new constituent of the organism, might say to Therapeutics that it has found therewith a remedy, even though it has found no indication for it, and that, indeed, with the same right, with which a rational farmer will, with the help of Chemistry, learn, from the ashes of any particular plant, what substances the soil must contain, that this species may thrive; and, as chemistry farther shows, that, of these substances, for example, the siliceous earth passes over into the straw, and the phosphate into the seeds, so, drug-provings must subserve the same end, which Chemistry alone is not able fully to accomplish for the human organism.

And even now, indeed, it will no longer seem strange if I affirm, that we should no longer say "*dat medicina salutem*," but must say "*dat nutrimentum salutem*."

While speaking of diseases of the eyes, I wish to remark yet, that the precious discovery of the ophthalmoscope offers a splendid field for the art of therapeutic observation; since, by its aid, all therapeutic results, within this small field, may be submitted to direct inspection.

But of course, he who takes the *contrarium contrariis* as his only guide, will not be able to follow up this advantage in this direction. *Contraria contrariis curantur* means that one should cure diseases with remedies which act against the former. That is a fallacy from relative conception, and also from one sphere to another. For, in the *contrarium contrariis*, the form of the effect is identified with the indication and the cause, at the same time, in such a way that the effect has been set up as an indication. It is an error from *false generalization* arising from relative ideas, which throws together, under one rubric, things which have no common properties. There is

nothing which simply and solely operates against the organism, without drawing new consequences after it.

From this fallacy of *contrarium contrariis*, arise the errors against the art of experiment in the drug-provings of the physiological school. This fault becomes the most apparent when one finds, for instance, Benzoic acid so often mentioned as an expectorant, and compares therewith §§. 208 and those which follow. Of the full extent of the active sphere of a remedy, the physiological school, by reason of this maxim, never thinks. It does not think, for instance, that beside the symptoms 187, 188, 189, 190, in the proving of Benzoic acid by Hering, which contain the entire sum of the practical knowledge of the physiological school regarding this drug, there may also be still other and farther reaching effects. It entirely lacks the Homœopathic differential diagnosis which *contains demonstrative conclusions, not conclusions ex post*, and which becomes possible only by such results of proving, and thus, all those phenomena are unknown to it which are further produced during the use of a drug. These it generally holds to be phenomena of the morbid cause, and, hence, falls into the most fearful confusion at the sick-bed, two examples of which, out of a countless host, I have given above. Thus, the error of *contrarium contrariis* misleads the physiological school according to the quantitative causal law, always to make use, and take notice merely, of that portion of the effect of a drug, at the sick-bed, which has become known from tradition or authority, as if a simple experiment were to be made, as if nothing else had been effected, and as if all art of observation had thereby come to an end.

§. 251.

Hering's proving of Benzoic acid, which I have given, must suffice to enable us to penetrate still deeper into the genius of the Homœopathic therapeutics. For this purpose I choose, as an example, a disease which seems suitable for the purpose.

One morning, a child, nine years old, complained of great headache and such violent pains in the right shoulder joint, that it could not move it. The anamnesis announced that its father, at the same age, had suffered from gout, and, as I was told, had often been attacked with it since; that the child, however, had taken cold while out of doors. The fever was moderate, and nothing farther was apparent, which could have led one to conclude that the disease was particularly severe. On account of the approximative correspondence in form, I ordered Aconite 3rd, five drops every two hours, in a spoonful of water.

The next day, after a delirious night, the right shoulder joint was movable again; but, on the other hand, several of the cervical and dorsal vertebræ, and both knees and ankles were swollen and immovable by reason of pain. The greatest pain in the regions of both tendines Achillis, could, by compresses under the heels and upon the calves, be somewhat relieved, but only for a short time. All these symptoms, in the forenoon, were only in the right leg, and, in the afternoon, came also in the left. In the urine, there was an abundant sediment of uric acid; moderate perspiration; great thirst. The third day, I found the same pains in the same localities, and the same state of the urine; the conjunctiva of both eyes was of a bright red; there was increased headache; hence the medication, thus far, was without any restraining influence upon the progress of the disease, although it moderated the fever, which, otherwise, must have been much more acute. The critical nature of the third day, although it dawned without any material aggravation, except an increased injection of the conjunctiva, (which, however, was not attended by any photophobia), and the absence of any improvement, sufficed to prepare the attendants for a more restless night. Since thus, the extension of the disease to the brain had to be feared with some probability, I directed *Belladonna* 3rd to be given in the interval. On the fourth day, after a sleepless night, with slight delirium, just as thus far, the previous nights had passed, the cervical and dorsal vertebræ, the knees and ankles were relieved, the urine and perspiration remaining the same, although the child complained, neither more nor less; except that, on inquiry, it said it had more headache than yesterday; yet its countenance had assumed an evident expression of sinking; this again allowed one to conclude that the disease had extended further, although the attendants had no idea thereof, and percussion and auscultation gave no indication of any change in the chest or abdomen. As the bowels had not moved since the invasion of the disease, and to make sure that there should be no ground to fear an eventual aggravation from this quarter, I prescribed a teaspoonful of castor oil, the *Aconite* and *Belladonna* being set aside. An operation occurred in course of the evening without any aggravation, but, at the same time, without any relief. Now the present state could not be considered any longer the mere result of the occasional cause already indicated, but I had to suppose something lying between, of which I have to speak anon, and to which, for the present, I merely allude in saying that now I found myself compelled to give a dose of Sulphur 5th. On the fifth day, though welcomed as I was with great joy over the event that the child had slept the whole night through, because her medicine

had probably contained some Opium, I yet could observe, by means of an objective examination, a more accelerated pulse, 116, and increased sinking of the features; on the other hand, there was more mobility and less pain—a mere aching pressure—in the joints previously affected, but, in place of it, violent pains, immobility and swelling of the left wrist and elbow, with a reddened swelling of the left index and middle finger. The urine was quite full of crystals of uric acid, and, in consequence of its decomposition in the bladder, the fluid was of an insufferable putrid odor, immediately after being voided; the discharge itself was painful. Now the opportunity was given to comprehend the entire form of the disease from the bottom, and to establish its correspondence with the form of the reciprocal action of some proven remedy and the healthy organism.

The child had not only lost its good humor from the beginning, but it was now anxious and easily frightened, also; was afraid of its dolls, could no longer express itself clearly, as it did not complete any sentence which it commenced; it was sleepy; complained constantly of pressing pains, coldness and confusion of the head, coldness in the forehead and in the back, although the whole surface of the skin was warm to the touch and perspired slightly. The eye lids were nearly closed and burning hot; the conjunctiva was more injected; lips trembling and dry; the tongue coated white; the taste salty; no appetite; much thirst; pulse 116; strength prostrated; a sense of general malaise and weariness, and, as before said, the joints of the elbow and wrist, together with the index and middle fingers on the left side, were swollen and reddened with a local temperature much increased; they were extremely painful and immovable; the urine was thick by reason of the above-mentioned sediments, scanty, very offensive and dark-red from uroxanthin; cough had also set in, though unaccompanied by any corresponding sounds in the bronchi.

§. 252.

The first thing in the physiological school is to establish the differential diagnosis between the form of disease at hand and the forms similar to it; thus, in this case, to decide whether it was arthritis vaga or acute articular rheumatism. Since the father had not been able to show the least sign of a tophus in his joints, said to have been affected by gout, so-called, and never asserted that he had observed any thing of the kind; since in the child, the shoulder joint, the knee and ankle of the left side were already very much swollen; since arthritis in its first attack, generally invades the great toe, while in this case its pre-

cursory symptoms were wanting also, and, above all, since the youthful age, of itself, hardly allowed any thought of gout, thus there was no doubt that the father had never suffered from gout, nor that the child did not now have the gout, but was affected by acute articular rheumatism. Concerning the diagnosis, regarding eventual complications or extensions, it was established that, in this child neither the heart, nor the lungs, nor the kidneys, had taken any part in the disease.

The *special therapeutics of the physiological school* consists in general and local blood letting; internally, in the treatment with large doses of Tartar emetic, with large doses of Nitre, with large doses of Quinine; further, in the exhibition of diaphoretics of Colchicum, Opium, Veratrin, Quicksilver, Iodine, Guaiacum, Digitalis, Sulphur, Phosphate of ammonia, Carbonate of iron, Citric acid, etc.; as an external application, to the affected joints, it uses Mercurial ointment, compresses wet with a solution of Saltpetre, blister plaster, Camphor fumigations, cataplasms, dry wrappings, friction with Chloric ether, etc. Even Aconite may be found of late in the literature of this school, as a remedy for acute articular rheumatism, *recommended* by its Homœopathic results, and all those numerous drugs are *transmissions* or *recommendations* of authorities, without any indication whatever being given for the particular case, although the physiological school makes the ultimate demand that every single case should also be *individualized*. But, in want of every leading principle, under which a given case might be individualized, in order to establish the indication of a remedy, this postulate reminds one of ordering a man to swim who never was in the water.

Accordingly, the indication of the physiological school, at the best, amounts to this: to give, *experimentally*, a diaphoretic on account of the causal momentum of the taking cold; to use leeches, or any other of the above mentioned external applications, on account of the local pains; or, internally, to give Opium symptomatically, and, on account of the scanty urine, Colchicum with Opium, which is one of the most favorite medications, and so on, just as each thinks he can best gain his end. In brief, every where *generalities only*, and no where any point of support which looks like a *special* Therapy; in no case is any *essential* indication possible.

Rademacher's school, to conclude from the other diseases appearing at the same time, which diseases, for the most part, appeared under the pathological form of the second specific state, would give Copper, with Natrum carbonicum, probably, after the supposed acidity of the stomach and intestinal canal had been neutralized; or, an organ-

remedy, to which probably the cough of the child would have led, thus, Ipecac, Tartar emetic, Aconite, Sulphur, Hyoscyamus, and, the excitants, Lobelia and Benzoic acid. Natrum carbonicum would be indicated from the fact even, that, in consequence of the sediments in the urine, a primary affection of the kidneys might be inferred. Or, since acute rheumatism, in general, occurs as a disease, which finds a place under the pathological form of the first specific state, Natrum nitricum.

It cannot be disputed, that the Therapeutics of Rademacher's school goes far deeper into specialities, and much better deserves the predicate *special*, than that which adorns itself with this name.

However, I must remark at this juncture, that, according to the foregoing paragraphs, this case of acute rheumatism under consideration, was neither suited to treatment by Copper, nor Saltpetre, nor even Iron, and, from reasons given in the foregoing paragraphs, not for any of the other organ-remedies, Benzoic acid excepted; but for this again, it was suited, but not on the grounds that a primary disease of the lungs might be supposed here, as we shall presently see.

Moreover, it must firmly be upheld, as one of the *prime fundamental maxims* of Therapeutics, not to use, for the purpose of a cure, anything which, in any respect whatever, might have injurious contingent effects, *to which all those doses belong, of which this school and the physiological* are wont to avail themselves; then again, as a *second fundamental maxim*, to neglect nothing which is useful.

Fundamental principles follow from fundamental relations, and since the fundamental relation of Therapeutics to disease consists in this, to establish a *restitutio ad integrum*, therefore every attempt, which can have an *injurious* influence, hence, an influence contrary to these maxims, even though it should seem to be ever so trifling as to the result, is *definitively a false one*. Consequently, even Rademacher's school is to be imitated, in its handling of drug-quantities, quite as little as the physiological. We shall see that they could dispense with these false methods of treatment.

§. 253.

The Homœopathic school proceeds, quite differently from other schools, for the establishment of its diagnosis and indications.

It holds fast to its principle of similarity, for the purpose of a *further differential diagnosis peculiar to itself alone*, which we have often elucidated heretofore, after it has previously, in the sense of the physiological school, fully satisfied the technics of diagnosis, and thus, for *its*

object, has gained, with these aids first, a *general*, but *no special* view of the disease in hand.

The Homœopathic diagnosis, thus, is not content with those differential diagnoses of the physiological school. True, it does not fail, first and in the same manner, to inquire whether, and how, other organs also, as the heart and lungs, etc., the frequency of the pulse and respiration, the temperature, the secretions and excretions, etc., partake of the general and accidentally most prominent form of the morbid conditions, in order to obtain a general designation, or one of the current names of disease; for its aims, in a more extended view, it rightly considers it insufficient to have undertaken and established a differential diagnosis, in the sense of the physiological school; as, for example, that, in our case, we have not to deal with arthritis, but with acute rheumatism, and not any other disease which might be more or less easily confounded with it by the ignorant; as, for example, that, in a case of hysteria, we had not to deal with hypochondria, catalepsy, epilepsy, chorea, intermittent fever, apoplexy, etc. To Homœopathy, all such names of diseases (as they arise from such *empirical* differential diagnoses, and, in the special pathologies and therapeiæ of the physiological school, are presented as the utmost limits of perception.) are all but mere *general* schemata, containing no speciality, no reality, which might be adopted to establish an indication according to natural laws; mere separate *ideas*, which can only serve for this purpose, *to bring* the diagnosticated groups of symptoms, by synthetic comparison, *into connection* with the forms which characterize one of the drug-provings. In like manner, under the rubric of *one* such nosological name, even the grouping of the most various drugs in such a generalizing manner, is unsatisfactory to Homœopathy.

In order to determine, according to natural laws, which of the remedies from that general group must be the specific one for the specific case, *i. e.*, the only remedy possible, it now undertakes *the differential diagnosis peculiar to itself*, between the phenomena of the special case (of disease) and the *phenomena* which all the above-mentioned, and still other drugs, present in their provings, in order, by comparison, to ascertain which effects of these proven substances correspond, as regards form, with the case of disease in hand. Hence, the *empirical differential* diagnosis of the physiological school is to be distinguished essentially from the *Homœopathic differential*, since *the latter only, is able to understand the connection of the pathological phenomena of a disease, with the physiological effects of drugs, and rationally to use this knowledge; a use which, according to natural*

laws, for the purpose of cure, as is readily seen, is the only possible one, although, to the physiological school, it is utterly unknown.

§. 254.

To comply with these requirements, we must inquire still further into the case of disease mentioned.

Suppose, according to the general scheme, that this case should be diagnosticated in the most exact manner, according to the rules of art, as acute Rheumatism, as is required by the physiological school, of its disciples; we find, *besides*, that the pains and swelling of the joints took their course from the upper part of the body to the lower, and, at the same time, passed over from the right side to the left. Even that fœtid odor of the urine does not belong to this case of disease, according to the general scheme, but belongs to the characteristic signs of the special or *Homœopathic differential diagnosis*. Further, to this special characteristic of the case, belong the timorous state of mind, the decrease of memory, the sensation of cold in the head, the pressing pain in the cervical and dorsal vertebræ, the drowsiness by day, the salty taste, the general weariness, etc. I will omit calling attention to any more of such signs, which the adherents of Rademacher and of the physiological school neglect to observe, as being quite unessential, or *such as they would not have noticed at all*, on account of the usual method, to establish *general* diagnoses only, and to use only accidental and empirical remedies, for which such *general* schemata, which they call *special*, of course, are more than sufficient.

From this it is clear, that Homœopathy still continues to investigate, long after the physiological school has finished its inquiries; that the diagnosis of the latter must precede that of the former, as a general introduction for a deeper penetration into the further circumstances which still accompany the general diagnosis.

When the stars and polygons of the kaleidoscope quickly change from one form into the other, there operates in the background, even though mistaken by the empiric eye, only *one* movement which explains the apparent magic. That is a picture of the diagnosis from the Homœopathic examination of a patient, which must have inquired into causes and conditions, and must have obtained an understanding thereof.

This differential diagnosis of Homœopathy alone, then, deserves the name of a *special* diagnosis, which is able to separate the particular case from the generality of the superficial pathological form,

to *individualize* it, and, accordingly, to make it prominent, and then first, we may further ask, is that substance to be found, according to the law of similarity, among those which have been proved on the sick, inducing symptoms on the organism, which, according to the form, correspond with those of the given disease?

Since the practicing physician, however, cannot spare the time to hunt up (in his books) the symptoms of more than three hundred drugs already proved, he must have them in his memory and carry them with him to every sick-bed. I do not make this remark altogether without purpose: for the opponents of Homœopathy say that nothing is easier than to write down, at the sick-bed, the symptoms presented, and then to refer to similar ones in the drug-provings. That, clearly, can only be the assertion of those who are given to measuring the perceptive capabilities of others by their own. If such narrow minds could ever elevate themselves so much as to undertake the great study of the Homœopathic drug-provings, they would learn, that no common, but a constantly practiced memory is necessary, in order always to remember the results of these numerous drug-provings, even approximately, as regards the characteristic of each separate substance, and to be able to compare them with the symptoms of any disease presented, without delay. I frankly confess, that, after five years' earnest study, I succeeded in storing up in my memory, but nine of the most complete drug-provings, and even this would not have been at all possible, without the numerous cases of disease which were presented for my observation, and without, during this time, having proved on myself Aconite, Belladonna, and Arsenic, in various quantities, from the traditional dose up to the 10th and 30th attenuations. After this, of course, that task was easier, since I could use these results of experience gained theoretically and practically, for the differential method of observation. I do not mention this for my own sake, but to give an illustration, how much easier it is to write a prescription of the physiological school, than one according to the art and science of Homœopathy; that, in fact, every one should refrain from assuming to himself the right of passing judgment upon Homœopathy *who has not proved at least five or six drugs upon himself, in traditional and minimal doses*, else he must count himself among those who love to hear themselves talk, though they know no more of what they are talking than a blind man does of colors.

Among the Homœopathic provings, of all the remedies of the physiological school mentioned in §. 252, we find, however, no such characteristic group of phenomena as was presented to me in that case of disease. Only in Hering's proving of Benzoic acid can they be found, and that under the figures 2, 3, 5, 8, 14, 32, 33, 59, 62, 95, 140, 141, 149, 150, 184, 225, 227, 230 b, 238, 242, 243, 252, 259, 332, etc., as they may be seen in §. 210.

In general, no substance of the outer world given to a patient, as a remedy, can exercise an influence merely on the parts remaining healthy, and *whether such an influence can really take place and be known beforehand*, is only to be learned by drug-proving; neither Chemistry, nor Physics, nor Pathology, nor even Physiology, as they are pursued in the universities, can give us any explanation or certainty as regards this question. Besides, in all Homœopathic drug-provings, as well as in the example thereof, offered in Benzoic acid, we find the reports of clinical confirmations of the principle of similarity. Notwithstanding the relation of Benzoic acid to gout, the form of which so nearly resembles that of articular rheumatism, that skillful diagnosticians are frequently unable to establish an empirical differential diagnosis between the two at the sick-bed, there was, after the establishment of the Homœopathic differential diagnosis, which satisfies that ungratified, though deeply felt, necessity of the physiological school "*to individualize the case*," nothing to hinder its use in the case of that child; hence there was no further question for me to answer, and I was, therefore, compelled, even after all these investigations, to declare Benzoic acid as the one, and only, remedy indicated.

Thus, according to *modality*, *relation* and *quality*, the indicated remedy was found conformable to the necessary requirements according to natural laws, the unfailing result of which could accordingly be foretold. There is no further room here for any sceptical wavering, hither and thither, in the choice of a remedy.

It was now the *quantity* of the dose only that was to be determined. But, on this point also, *practice* had repeatedly decided, aside from the contents of the previous paragraphs. For reasons now comprehensively given, I gave the child three or four drops of the third decimal attenuation, in a table spoonful of water, every two hours.

What followed I need hardly mention, after what has been already said; to every one versed in the study of Homœopathy, at least, the result is already known; but, for the benefit of the ignorant, I must

further add that the child, on the next day, was without headache or back ache, or red eyes — in short, was well; only the left elbow joint and the index and middle finger of the left hand, though considerably less swollen, were still sensitive and immovable. On the tenth day, I found the child quite free from all pain; all the joints could be moved readily again, as if nothing at all had happened. She played again with her dolls, ate with appetite, and, the next day, I allowed her to get up, as entirely cured, and return to her usual mode of life. Thus Homœopathy, by its experiments, and logical instruments, attains to many therapeutical results which Chemistry is much too weak either to furnish or to explain.

§. 256.

A cure by a *function-remedy*, by Benzoic acid, must be followed now by a cure by a *nutrition-remedy*, in order to give a needful insight into these natural motions. I do certainly prefer to choose again a disease declared by the physiological school to be *absolutely incurable*, enchondroma, which is turned over by this school, without much ado, to surgery for amputation or resection.

The first case of enchondroma, cured in my practice, was that of a poor boy fourteen years old, of a very pale countenance. He showed me his right hand, after he had taken off a useless bandage. The metacarpal bones of the ring and middle fingers, the index and middle fingers themselves, and the thumbs were swollen up to such a degree as to form oval, knobby masses of uniform surface, and hard; the joints were all obliterated, and not to be recognized, and hence, for six months, immovable also. These parts were, at various points, divested of their skin by ulcerated surfaces, under which the bones gave a rough sound to the probe, and places were found here and there which could easily be penetrated, and others again which offered resistance. The boy had no appetite, was still kept at work by a potter, carrying clay, etc., and naturally did not wish to give up this occupation, since it had to furnish him his scanty support. His complaints were confined to great pains in the suffering parts, great drowsiness during the day, great lassitude and depression. According to the doctrines of Surgery, taught to this very hour, there was no other help for him than a disarticulation at the wrist, with a loss of the right hand, since only the little finger, and its metacarpal bones, seemed free from the disease.

Enchondroma is the name for the pathological process of the cartilaginous metamorphosis of the bones; the new formation, in which it

consists, agrees most completely with cartilage, in a morphological as well as chemical respect. A surgeon would not mistake it, from the above description, even according to its outer form, and since I write neither for skeptics nor dogmatists, but for practical physicians, and men capable of criticism according to natural laws, I consider myself excused from a detailed description.

We know that, of all the constituents of bone, the cartilage lacks only siliceous earth. In 25,628 grammes of adult bone, there are 0.003 of siliceous earth. Could it be possible, under such circumstances, to think of giving the siliceous earth as a nutritive means, in a quantity corresponding to the traditional dose?! Thus, I gave to this boy Silicea 6, five drops every two hours. True, siliceous earth must have been conveyed to him by his usual food, but his organism had lost the faculty of appropriating it from the food. That it may be taken up in the given form, is clear from §§. 220 and 221. But if the stomach and intestinal canal, in brief, if those of their functions which should have taken up the siliceous earth contained in the food, and carried it to the blood, were clearly not able to do it, for otherwise no such disease as enchondroma could ever have taken place, (since it is only possible as a consequence of this want,) then it must be accomplished in some other way.

Assuming the position (one that really exists according to this statement,) that we had arrived, in our deductive series, at the second deductive operation—for the first was supplied by the pathology of enchondroma and the physiology of normal bones—we must yet take counsel anew with anatomy and physiology, as to the appropriate locality for drug-application.

If we consider the anatomical conditions for taking up the molecular bodies into the blood, we find, upon the tongue, the *papillæ filiformes*, with their hair-like processes turned inwards, leading directly to the cells, and which do not readily allow that which they have once taken up into their channels to escape, but transfer it to the blood. The mucous membrane of the cavity of the mouth, throat, and œsophagus, as well as that of the rectum also, is adapted to take up, very rapidly, what is not larger than the orifices of their epithelium, while, on the contrary, the structure of the mucous membrane of the stomach is almost entirely glandular, and *excreting*, so that its possibility of absorbing molecular bodies must be far less than that of the above named parts. The mucous membrane of the stomach is chiefly a *reducing* organ, for the elaboration of such substances as are more dense than water. Only to those solutions which do not *exceed the physical density of water*, is the possibility given to penetrate the

mucons membrane of the stomach also, to be taken up by it, and to be transferred to the blood. Chemical mixtures, infusions, decoctions, immediately produce an increased secretion of the gastric mucous membrane, and we may assume with certainty, that only the most minute parts thereof will escape the decomposing combination with the secretion of the stomach. In this, at the same time, one of the possibilities is also explained which can still lend efficacy to such great quantities as are used in the physiological school, and besides this, the necessity that these very same doses must lead to irretrievably injurious results, as daily experience also teaches.

In general, it may be maintained that the effect of the remedy, once it is introduced into the stomach, must be uncertain or destroyed.

Thus, the *point of application* for molecular bodies, if they are to be transferred immediately to the blood, is determined, and that, in the form of the second deductive operation, so that the question can only be whether this is sustained by facts.

If this confirmation were not to be found every day in Homœopathy, though utterly unknown to the medical majority, I should not have thought it necessary to have settled this question, also, by an example. Thus the luxurious pseudo-growth of the cartilage cells, which, in enchondroma, crowd out the osseous cells, had, in case of this child, so diminished in course of eight days, that the superficial ulcers could begin to cicatrize, since, at the same time, those tuberous formations had manifestly *decreased in extent*. After fourteen days more, the joints were already movable again, though the mobility was very much restricted. After another fortnight, all the concomitant symptoms, which had been present, disappeared; appetite had returned, the drowsiness, during the day, had ceased, the boy was lively and of good cheer, and rejoiced over his improvement.

It is impossible for me to expatiate upon any subject, and dwell longer upon it, than is absolutely necessary for it to be understood. Hence I may here be permitted to close, with the statement that this boy, after eight weeks, was perfectly cured, and has remained so for sixteen years, which surely justifies the further conclusion that he will stay so. Consequently, that inference of the second deductive operation, regarding the locality of application for the Homœopathic attenuations, is also verified, and, moreover, from this verification follows the abstraction that the same relation *must* likewise hold good, without doubt, in case of all Homœopathic attenuations.

Yet it may be remarked, by way of comparison with the conclusion of §. 255, that I did not take the indication for Silicea merely from the Homœopathic drug-provings, which contain nothing about

enchondroma, but chiefly from the chemistry and microscopy of the physiological school. This school, however, since the dose, as demonstrated by natural laws, must have been a Homœopathic dose, so-called, will not be restrained (as this is attended with less trouble) from continuing to disarticulate, resect and amputate, instead of curing a human limb so easily saved; for, to judge from well-known experiences, a conclusion according to natural laws, is, and ever will be, to this school something foreign.

That conclusions, according to natural laws, have not yet, even in Homœopathy, become common property, is shown by the circumstance that the cure of cataract and enchondroma, in spite of this clinical case, is still held impossible. Well, then, nothing more is left, than to cite these opponents, worthy of pity, before the forum of practice, to which I always appeal. As long as one has not proceeded in this matter, as I have, he needs waste no words about it.

An immeasurable advantage of Homœopathy must also be mentioned here, *i. e.*, that, after it has effected a cure, there is no *re-convalescence*. If the disease is cured, the patients are not exposed to the dangers and difficulties of a treatment or re-convalescence *post festum*, and that may be explained by, and follows from, the fact that the digestive organs, as well as the parts remaining sound, are spared, and that the injurious contingent effects of the drugs are avoided, occurrences which are possible by virtue of the dose and its point of application, an advantage and a gain which the physiological school can never reach.

§. 257.

If a disingenuous disputant should be inclined to ascribe these two effects of the use of Benzoic acid, or of Silicea, or, in fact, of any Homœopathic dose, to the effect of the *diet* employed, to such I would reply, that the child afflicted with acute articular rheumatism, did not eat any more, it is true, from the first day of its sickness, since it was in the minimum of its proportional oscillation, and drank nothing but water, under which diet, had it contributed any thing to the cure, and had it not rather been the direct result of the disease, the child should have recovered far earlier, and the disease should not have extended itself through five days as it did.

As for the boy, he was as little able to regulate his diet as the former patient; he ate every day just what his master set before him, and although at the beginning he did not eat much, yet he was not put on a sick-diet. As his appetite returned, he had as little choice of his

food as before; he had to content himself with what came on the table, and this was nothing nice. This, above all, is one of the great advantages of a remedy consisting of molecular bodies, that one need not be nearly so anxious about the diet, as has been hitherto supposed. On the contrary, cures must be and are effected under the worst diet. If physicians knew how often they were *deceived* as to the diet, they would not be so particular about it.

It is a fruitless stratagem to maintain that the Homœopathic diet is the cause of all the results. The Homœopathic diet consists, now-a-days, if one can and will be particular, in nothing else than avoiding such food and drink as might disturb the action of the remedy, as for example, food prepared with vinegar, while Calc. carbonica is taken, or Coffee, while Nux is taken, or of wine during the administration of Aconite. Moreover, those substances should be avoided, of which the patient knows, by experience, that they are injurious to him, or the injurious properties of which are known even to the physiological school, as, for example, fat in diseases of the liver, or substances, which, being non-nutritious, have an accelerating or retarding effect upon various functions of the organism, as Parsley, Asparagus, etc. As a rule, one may let his patients eat what they have an appetite for; for every cure needs the best *nutrition of the parts remaining sound*, since a cure is possible only by their aid. For a long time, indeed, Homœopathy has ceased to consider and arrange the diet any further than to avoid all injurious influences; to arrange and use such a one as would avoid all injurious substances. The fables of our opponents, upon these points, can only be accounted for by their ignorance touching these facts.

One, however, must keep clearly in view the difference between drugs and food, as one often hears the ignorant say that Homœopathy is a consummate chimera, since it depends upon the laws of nutrition, but yet directs minimal doses which can afford no nourishment for a man. This senseless reproach is made by the opponents of Homœopathy in all earnestness, but it serves only as a proof of their infinite stupidity. That such a reproach is a ridiculous stratagem, their power of judgment does not, in the least, perceive. To such we may propose the question, in return, why does the pearl-oyster form its calcareous shell only in those waters in which the least proportion of lime is to be found?

In course of time the fact has become well established even, that, in many cases, the usual diet cannot offer the least hindrance to the effect of molecular bodies. Indeed, one and the same substance used in its common massive form as a food, does not prevent its molecules, when

set free, from obeying the laws of their specific direction. Thus, for example, Coffee acts most surely in the second and third decimal attenuation; *i. e.*, without delay goes its way to the diseased correlatives of the organism, even *in patients* who drink a cup of strong coffee two or three times a day, and for whom coffee is indicated. This experiment can be made any time, and will not fail, but will, again offer the clearest proof that the quality of bodies, *in their massive state, for the reasons already laid down, has nothing to do* with the effects or qualities of bodies in their molecular or free condition, and that *each can* produce its specific effects *by the side of the other*.

§. 258.

The "*similia similibus curantur*" has, in fact, to decide regarding many things which concern operative Surgery and Obstetrics. Applied in such a manner, as is very completely set forth in this work, it is able to cure very many cases, which, by physicians who do not know it, can only be looked upon as subjects for operative Surgery and Obstetrics. The practicing physician is not in a position to devote himself to a speciality, as it is possible, in cities where we have universities, and in capitals. His patients must find a man, in him, who is instructed, theoretically and practically, in everything which pertains to the domain of medical, chirurgical and obstetrical art and science. A simple example, in addition, shows this. The adherent of the physiological school, for instance, meets with success in many cases. If, at the same time, he is conversant with the experiences of Rademacher's school, then he clearly accomplishes twice as much. If he is also familiar with the doctrines of Homœopathy, then a three-fold success must attend him; if, at the same time, he is a surgeon, a four-fold; and if an accoucheur also, a five-fold. Each one of these particular specialities has its own art of observation, its own art of experiment, its own language and perception. No one of these specialities can, hence, be allowed upon the ground of its peculiar views, to isolate itself, and to oppose the other, so long as it is not able to offer its advice, *founded upon natural laws*, and, consequently, cannot determine, beforehand, the result, at least inductively or abstractively.

§. 259.

Many substances, though often proved, are yet not so thoroughly proved, that induction could not make experiments which would serve as a complement to these provings.

As a proof of this I may mention, for example, among blood diseases, chlorosis. Homœopathy possesses a multitude of remedies for this disease, yet there is one which it does not possess. I found this remedy by logical induction from the abstractions of Rademacher's school, and from the external use of various metals, as they appear in the metallo-therapy of Dr. Burg. It is Copper. My induction was deductively confirmed on the sick, so that I need no longer merely to recommend it, since I can establish its indispensable worth in this disease, by natural laws. Without dwelling any longer upon the art of experiment and observation, which is to be used to discover new remedies *by the inductive method*, even — since this has already been done abundantly in previous paragraphs — I only remark further, that from none of the Homœopathic drug-provings does it appear that Copper is a remedy for chlorosis. Even Rademacher's school does not know Copper as a remedy in chlorosis; still less the physiological. The latter, as is well known, complains most recently, with one accord, of the increase of anæmia in the population, and recommends Iron against it, on the ground that the red blood discs contain Iron, and that chlorosis is the outward sign of an excess of the white blood discs. Yet the Iron of that school helps, as it knows itself, only in some cases of anæmia and chlorosis; other cases undergo no improvement from that remedy, but material aggravation. Quite early it attracted my attention, that cases of chlorosis, over-fed with Iron, and aggravated almost to dropsy, in my hands were cured by the use of Copper, and thence I drew the further conclusion, that [in order not to anticipate what is to be mentioned hereafter, and to be brief] Iron, as a general rule, is only adapted to the so-called florid cases of anæmia and chlorosis, and Copper for the so-called torpid cases.

The physiological school thought it observed that, in many cases, Iron was not well borne by chlorotics, that it disturbed their digestive organs, and that this disturbance was the chief cause of the aggravations. So some of its adherents found that Cinnamon, and others that Saffron, when added to the powders of Iron, prevented these contingent effects and aggravations, since by the influence of these "aromatics," the digestion remained undisturbed, and the cure advanced much more rapidly than without the addition of these

drugs. In other cases, both found that the chlorosis, nevertheless, very often bade defiance to both these compositions.

This gives new opportunity to confirm the indications of this school, as such, as they have already been often characterized in this work. *They have no basis established upon natural laws.* Many wretched chlorotic patients treated by that school, have sought help of me, and as they showed me their prescriptions, I saw that all those with whom Copper was not indicated, had had Iron, it is true; but, as I supposed, it was always those who were suffering with chlorosis in combination with *amenorrhœa* who took Cinnamon with the Iron; or those with chlorosis and *profuse menstruation*, took Saffron with the Iron.

Had these gentlemen been acquainted with Homœopathy, they would have had the desired result, at least, in those cases which were really curable with Iron (if accident, in consequence of their ignorance, had not played them the trick of urging them on to pursue a wrong course), if, in the former cases, they had given Saffron, in the latter, Cinnamon in connection with the Iron; for Homœopathy knows, from its drug-provings, that Cinnamon in this dose, as it was here used, produces retention of the menses, and Saffron the contrary, so called.

The wretched game, of bandying relative ideas back and forth, half a century has not been able to bring to an end. If I had accomplished nothing, I should at least be allowed to lay claim to the single acknowledgment, that I have clearly demonstrated that the strife of the *Contrarium* with the *Simile* is a strife about nothing, a strife with mere ideas of relation; and the strife of Rademacher's school with the others, was again a strife about nothing, because it was carried on about the right or wrong between abstraction and induction; to investigate into facts, however, with a criticism based upon natural laws, has, in all these controversies, consistently been neglected.

The results of these strifes, therefore, might well come to an end; they are sad enough. For half a century have physicians tormented and persecuted each other, with all the tortures of hatred; the public has been, for half a century, the anxious witness, and lives in constant, hopeless doubt, over the competency of its physicians; hence, quackery must needs gain ground in every direction, even in this *thinking* Germany.

That would have been impossible, if the *intellectual* watchmen on the battlements of science had known how to disarm, without delay, every false notion endeavoring to gain admittance, with the power of logical instruments, with the art of experiment and of observation.

If, however, it appears neither from the provings of Silicea, that it could cure enchondroma, nor from those of Copper, that it could cure a form of chlorosis, and if, in fact, cures are also reported by many thinking Homœopaths which, at the present time, can only partially be explained according to the law of similarity, all this would, nevertheless, be very far from justifying the conclusion that even Homœopaths were allowed to hold such cures impossible, and to deny them *brevi manu*. To deny is, surely enough, the lowest and easiest of all stratagems of which one can make use, but, at the same time, without any other worth than that of a reckless animosity.

If we should, on this account, thrust aside the inductive and deductive method, without making any use of it whatever, then quite a number of successful results would be lost to us.

Should we consider the logical instrument as a superfluity, because it is not directly expressed in the wording of the law of similarity? should we obstinately declare the considerations of humanity objectionable, and close our eyes against any and every progress in Homœopathy? Did not the great Hahnemann himself, point out the logical dealing with Therapeutics? Hence I maintain that all progress which has originated with a Homœopath, as well belongs to the subject of Homœopathy, and as well has become its property, as all its other doctrines. Only the spirit of inhumanity could cry out against that!

To an unfair disputant it is, as experience teaches, the easiest thing to say, even, that the proving of Bromine contains nothing about croup, that, hence, it cannot be used in croup, according to the law of similia. But, from Homœopathic provings, happily enough, no *names* of diseases can arise, and are there not symptoms enough in the proving of Bromine, to demonstrate its effect upon the larynx and air passages?

Hence the law of similia is in no wise so to be understood, as that the entire contents of a drug-proving must correspond with the whole form of a disease. For the physician well versed in practice, a far less comprehensive similarity between the form of the remedy and the form of the disease, often suffices; *often only a single pregnant, prominent symptom*, [as Dr. v. Bönninghausen teaches, in his Therapeutic Pocket Book, p. XVIII.] suffices to establish, notwithstanding that, and frequently just for that very reason, an indication followed by the best results.

Let us not be diverted, by controversial objections, from unwearied labors to advance our great art and science.

If we cast a look back upon the cases of disease just cited, it cannot be doubted that the events, there observed, are calculated to awaken

the sure conviction that, in future cases of the same kind, the same treatment would necessarily have the same results, without being obliged first to examine these cases anxiously, according to the law of similarity; for they leave behind the whole law of their characteristic outlines, the whole schema of their course, as perceptions objectively gained.

The using of such schemata at the sick-bed possesses the character of rational induction, §. 71, for the schema is a perception from memory, not merely a subjective expectation from similar cases. To possess such schemata is an essential attribute of an experienced practical physician, who is able therewith to produce the greatest results, most incomprehensible to those less experienced.

How far the power of Homœopathy exceeds that of Surgery, is made clear by the example of the cure of Enchondroma, in §. 256. As regards Obstetrics, one example, at least, from the many at hand, may be added. I say nothing of Pulsatilla, which, in the third dilution, is quite able to supplant the deadly Chloroform, where the pains are severe; nor will I speak of the precious remedies for the most varied and severest cases of fatal child-bed fever, but confine myself to the hæmorrhages, often fearful, occurring in abortion. Whoever has been in the situation, on account of a placenta prævia, to proceed, without delay, after other means have failed, to the artificial expansion of the mouth of the uterus, has seen the mother, swimming in her own blood, struggling with death, and yet has been compelled, perhaps in the last moments of her life, to occasion her the greatest suffering (to say nothing of the attendants abandoning themselves to every frantic expression of pain and anguish), such a one owes the deepest gratitude to a science which knows ways and means to afford help, even in such cases, by the internal use of China, Arnica, Sepia, Sabina, Crocus, etc.; which remedies, according to the individuality of the mother, and in accordance with the law of similarity, can not only check the most fatal hæmorrhages, but also remove the injurious consequences of such enormous losses of blood.

§. 260.

There is no doubt, that, notwithstanding what has been already said, those who have resolved, for obvious reasons, to take up the study of Homœopathy, will yet find it very hard to proceed at once to its application in practice. A Text-book of Homœopathy must, therefore, be all the more able to assist any follower of science, since, as a rule, it is left to every one's private study to make himself

acquainted with it. To a beginner, no better lesson can be given than that of relating the circumstances through which one had to pass to become a true adherent of Homœopathy.

I will, therefore, detail the three first cases which compelled me, with irresistible power, seriously to appropriate to myself the doctrines of Homœopathy; for, every previous effort to instruct myself by the Homœopathic literature, I was obliged to abandon, how often so ever I made the attempt, because their contents were too repugnant indeed to the dogmas which I had learned in the physiological school. Most of all, I was repelled, over and over again, by reading a few Homœopathic drug provings; for they seemed to me partly too much alike, partly incredible, partly too much for the memory to retain.

I will only add, that these cases date from the year 1849, and that, in the second case, especially, as true a picture of confusion is given, as an incipient Homœopathist can ever fall into.

Cadet, Count R., nineteen years old, sick with Typhus abdominalis, received, on the 9th of September, an emetic, and in the evening Calomel; wet cups to the abdomen; salep drink; Calomel was taken till the 12th, on which day he took an infusion of Ipecac on account of constant diarrhœa, which was sometimes bloody. On the 14th, Opium was added; on the 15th, Alum internally, with vinegar lotions; on the 17th, Aq. oxymuriat. was added to this prescription. At night, on account of profuse hæmorrhage from the rectum, Phosph. acid and cold compresses to the abdomen; on the 18th, Alum enemata, in addition to the above; on the 20th, on account of persistent bloody and purulent discharges, Plumb. acet. with Opium; cold injections. In the evening, a council was held, in which I objected to Plumb. acet. and Opium, because cerebral symptoms were already present, yet upon the senior physician's expressing his special confidence in these remedies, it was concluded to give Plumb. ac. once more, without the Opium. Now, marching orders came for the Hessian frontier, and the patient was transferred to me on the 22nd. Since I had sufficiently satisfied myself of the uselessness of this treatment, as the diarrhœa continued, with very considerable discharges of pus and blood two or three times a day, accompanied with meteorism, delirium, somnolence, so that the most unfavorable prognosis had already been pronounced by the physicians who had left, (indeed they declared that the patient had but two or three days to live, and had given him up), Allopathic resources were exhausted. Now I determined to put Homœopathy to the test; for in this case there was nothing more to lose; on the contrary, nothing else was left but to make an experiment, in any case harmless, which, how-

ever, if the doctrines of Homœopathy were founded upon truth, must bring a cure even in this case given up for lost. The Homœopathic law of similars prescribed for the case in hand, *Carbo vegetabilis*. On the 22nd, I directed all other remedies to be set aside; retaining merely the vinegar lotions, I took a grain of beech-coal, which, as already said, is recommended for this stage by Homœopathy, and triturated it with a hundred grains of sugar of milk, an hour long, according to directions. Instead of the coal soon becoming invisible in this quantity of sugar of milk, the mass became darker the longer I triturated. Under the microscope, these particles of coal were mostly about $\frac{1}{10}$ of the size of the blood-disks, and formed the finest dust, hardly perceptible when magnified 400 times, (Oberhäuser, System No. 8, Ocular No. 3). Hence, it is clear that these particles of charcoal could find their way wherever the blood disks went, that is, immediately into the capillary system. From this powder I took six grains, triturated them with a drachm of sugar of milk, divided them into six parts, and directed a portion to be given every two hours during the night.

The next day, the stools were red with blood, without coagula, though with considerable pus, evident to the naked eye, even; however, there was no stool at all, without enemata of water, of which I directed three to be given every day. On the following night there was more sleep, and less delirium, but on the next day no more blood in the stools. Now, I prescribed the same powders, *magistraliter*, from the apothecary; they possessed the same properties as mine, and were given every three hours. In the evening I noticed a *shorter respiration, cough, cold hands and feet*, so that I thought there was reason to fear a new localization of the typhus-process within the lungs; after the last injection, however, there was no more pus to be seen in the stools, and I hence saw no further occasion for interference. On the night of the 25th, there was but *little sleep*, but no delirium, so that in the morning the patient, of his own accord, declared with regard to his condition, that he was glad to be finally rid of those distressing visions. In the evening, the *patient himself* felt the coldness of his extremities, so that, although the temperature in the room was at 14° (R.), he wished more fire. That was very remarkable to me, indeed; for, till then, I had never heard a typhus fever patient complain of coldness: besides this the respiration became all the time shorter; the *thirst increased very much; in the expectoration brought up by the frequent cough (which was so violent as to provoke vomiting of bile), bloody foam, as in pneumonia*, was observable; these symptoms, according to Jahr's Symptomen-Codex, were to be ascribed, therefore, to the effect of the Charcoal, and all the more, as

it had already arrested the discharges of blood and pus, and the patient did not feel at all oppressed, and could take a deep inspiration without difficulty. The Charcoal was hence laid aside at once, and water was given, containing a third part of white wine. From this time forth, the patient took no more medicine, and, with unusual rapidity, convalescence set in. On the very same evening, the Charcoal symptoms began to abate; the tongue, which thus far had still been dry and cracked, became moist, and the night wrapped the patient in quiet, refreshing sleep. On the 27th, the skin perspired slightly, its temperature again became normal, as was the respiration; the stools, however, after each enema were still fluid, and, in the evening, for the first time, a fœtid passage was again observed. Through the day, now and then, there was still cough, with slight vomiting. On the 30th, the sensorium was free, the Charcoal symptoms were all gone, and, with the first consistent stools, on this day, all the immediate consequences of the typhus might be considered as extinguished. October 1st, clean tongue, appetite, convalescence. On the 20th, he was well.

Those who interest themselves in *Materia Medica* I especially request not to run over the history of this case with Allopathic superficiality, but, with the aid of this illustration, to impress upon their minds a lively picture of the succession of phenomena, in order to form a correct conclusion. The results of an immature treatment, viz., the Homœopathic aggravations, against which I might have protected my patient, had I at first believed in the efficacy of Homœopathic doses, and had I placed less confidence in what had been taught me by my own school—these results, which I produced by too strong doses, but which I found already mentioned in Jahr's *Symptomen-Codex*, before they occurred to me, necessarily confirmed in me, therefore, the conviction of the truth of the Homœopathic observations, as well as my confidence in Homœopathic remedies; for such ocular demonstrations cannot be thrust aside by any power.

Those phenomena which were the results of too strong doses in this case, and the two following, I have carefully *italicized*. One may see, by these, that every drug produces peculiar phenomena, though some seem to resemble each other in some respects; all, however, from an Allopathic view, would not find that consideration which necessarily belongs to them, and which, indeed, as it partly happened in my own case, would be so far misapprehended, that they would be taken as belonging to the disease and be frequently mal-treated.

§. 261.

A son of K., a shoemaker, a year and a half old, was committed to my care, with the remark that his disease began with catarrh, although the surgeon, who had been treating him for fourteen days with Calomel, leeches, tartar emetic ointment on the head, etc., had declared that now there was water in the head, and that, on this account, he wished a physician might be called in. I found a child much reduced, whose large fontanelle, which was not yet closed, was normally depressed; the size of the head was not abnormal; upon the hairy part of the head, there were numerous incipient tartar emetic pustules; shortness of breath; frequent, generally dry, cough; on the right side of the chest, over the whole lung, there was a prolonged râle, with large and small crepitations, not interrupted by inspiration or expiration; on inspiration, this râle began gradually with a large crepitation, then became more and more a smaller crepitus, and at the same time, approaching nearer and nearer towards the ear, while, during expiration, the converse of this took place; in short, there was a case of Broncho-pneumonia infantum in the last stage, in which the well-known encephalopathic symptoms were already prominent, which, probably, led the surgeon to think of hydrocephalus. Although the prognosis was the worst, I, nevertheless sought, considering that the powers of the child were not entirely exhausted, to relieve the chest mechanically of the mucus. An infusion of Ipecac with Tartar emetic did not produce vomiting; I saw, the next day, by its gestures, that it was merely nauseated; the cough was always accompanied with expectoration, and was less frequent, but, on the whole, was no better; the child still suffered from difficulty of breathing; was indifferent, and, on the third day, was so feeble that its attendants said that they had, the night before, already prepared it for its departure to the other world, by prayer. It received *Natr. bi-carbonicum*. Everything was worse; the child took no notice when spoken to, and slept no more.

On the fourth day I found it surrounded by all its relations, who had come together to lament over its death, and covered, all but its face, with a pall; its hands closed, as if in prayer. I was told that it had had convulsions, with grating of the teeth, and had been lying for half an hour unconscious and motionless. Its breath was intermitting and its pulse not to be found; its color death like, with puffiness of the face; drops of cold sweat were on its lips and forehead; its extremities were cold; its eyes closed; on opening them, the pupils were found to be fixed, insensible to light; the head was convulsively bent backward into

the pillow; in fact, it presented the very picture of death. However, the opisthotonos, of itself, showed that there was a spark of life left, as well as the fact that the eyes were still clear; yet I was helpless, till I finally remembered a paper, by Professor Horn, in the *Neue Medic. Chirurg. Zeitung*, No. 1, 1850, whose experiments on frogs showed, without a doubt, the relation of Belladonna to the brain and the central ganglionic system, as well as that of Aconite to the cardiac plexus; Horn's prescription, however, was evidently Homœopathic. I prescribed Extr. Aconiti, Belladonnæ ãã grss. Aq. destill. ʒ iv. D. S. a spoonful to be given every hour. When I gave this prescription to the mother, with the request that it should be obtained at once, she and her friends inquired whether the child could live till one could return from the apothecary's, and whether they should trouble the dying child with any more medicine? I replied, that it must be done, as the responsibility rested on me. After three hours, the mother came to ask if the child's linen might be changed; she said that it did not bend its head backwards any more; that, since the second spoonful of the medicine, *it had been as red, first in the face, and then over the whole body*, as if scarlet fever or erysipelas had broken out, and that, since then, all its clothes were wet through with sweat. It was difficult to suppress my indescribable astonishment, but I assured the mother that she might make the change without risk, and that it was neither scarlet fever nor erysipelas. In a couple of hours I saw the child again, and found it revived; the pulse was 150, it is true, and the respiration 78, but the eyes were open and the opisthotonos was gone; the warmth and color of the skin were normal; the redness and the sweat lasted only half an hour, perspiration was slight, much thirst, cough without effort, with copious expectoration. In view of such a rapid and more than to be desired change, every physician would have considered, with me, that the dose of the Acon. and Bell. was too strong. From this solution, hence, I put a spoonful into a cup of water, and directed a teaspoonful to be given every two hours. As if transported into another world, I betook myself, of course, to Jahr's Clinical Guide, Hartmann's Special Therapeutics, etc.

On the next night, August 16th, the child had more than four hours of quiet, uninterrupted sleep, the first for a long time; the next day, after two violent attacks of cough, convulsions with opisthotonos, but transient. Every two days the medicine was renewed, though scarcely a fifth part of it was used, for it became turbid, and had to be thrown away, so that by the 23rd of August, about half a grain of Aconite and Belladonna might have been taken. The condition of the child, as well as the râle in the chest, was, upon the whole, the same up to

this day, except that the convulsions with the opisthotonos were every day less frequent, and finally ceased altogether. But now I observed a *notable dilatation of the pupil*, and, hence, gave the Aconite in the same dose, without the Belladonna.

Up to the 25th of August, every thing remained the same, only the dilatation of the pupils seemed to decrease. Then I discovered *that the tongue was dry and brown*, and considerable diarrhœa had set in. I gave, together with the Aconite, a few doses of Aq. oxymuriat. After two days the tongue became cleaner again; the diarrhœa continued, the weakness of the child clearly increased. I was informed that it was frequently cold in its extremities; on the other hand, its cough was less frequent, its respiration easier, although the râle on the right side had not changed in the least. The peculiar *position* of the child's arms, at right angles with the body, as if from *weariness*, spread far apart, but otherwise lying in an unrestrained posture, and a *peculiar cracking with the tongue* now and then, with constant longing *for drink*, were the only abnormal phenomena; it looked, however, towards those who spoke to it, and drank milk freely, which was its only food. Called suddenly on the 29th of August, I found it incessantly *moving its lower jaw towards* its upper, turning its *eyes* in every direction, especially *converging* them, so that the pupils disappeared; the *limbs were cold*, the pulse was not to be counted, the respiration extremely short. What now? I watched the child probably for a full quarter of an hour, when, for the first time, the thought of an aggravation from Aconite occurred to me. The second thought was: this could not be possible from such a dose; the third drove me home to Jahr's Symptomen-Codex. There, in truth, I found an explanation of all prominent, but to me inexplicable symptoms of the past few days. I set Aconite aside and gave Coffea. No improvement followed. I had no Homœopathic remedies at my disposal, and for a long time I had not seen any Allopathic indication; hence I turned to Belladonna again for help, and those symptoms disappeared in a couple of days. Although the diarrhœa had decreased, and the child had several times taken a biscuit, it yet became more and more emaciated; it became sleepless again; the apathy increased; the râle in the chest, arising from a viscid fluid, which, on respiration, seemed to move with difficulty, to and fro, between the distended and swollen bronchial mucous membranes, remained the same, as did also the cough. Yet I dared not, in this state, give an emetic or Sulph. aurat., while, from Moschus and other remedies, I could expect nothing. It was high time to take counsel again with Jahr's Symptomen-Codex, and here I found Calcarea carbonica indicated for

my patient. As the *lapides cancrorum* contain only six-tenths of Carbonate of lime, and the rest is animal matter, I ordered half a grain of these to be triturated most thoroughly with sac. lac., the whole to be divided into 24 parts, one to be given in the afternoon and one at night, as I mainly depended upon the powerful trituration of these crabs' eyes with the sugar; this was on the 4th of September.

On the 5th there was a remarkable change of the whole scene. The child itself held a biscuit to its mouth with its own trembling hands, and devoured it with great appetite, while the day before, it lay in complete apathy. Its look was normal, and its eye was attracted by the most striking things about it. Pulse 120. It had slept the whole night through, save a few short intervals, and, at present, did not show a single symptom calculated to destroy the renewed hope. I prescribed another powder. But towards evening of the same day, the mother came in great haste, saying that the child had frightful attacks for the last half hour. I found the child squatting in a corner, with a *frightened, anxious face, disturbed look, cold hands and feet, pulse extremely accelerated, sudden attacks of cough producing such an expectoration of mucus, that the child broke out in loud cries, in its danger of suffocation. These attacks at first recurred every ten minutes, but finally began to be less frequent.* Though yet a beginner in the study of the Homœopathic Materia Medica, I nevertheless recognized the *Calcarea carb.*, in spite of its small dose, as the cause of these strange phenomena. Surprising as they were to me, these symptoms were, nevertheless, a strong confirmation of those laid down by Homœopaths, as occurring after the use of small doses of the Carbonate of Lime. Thus the powders were set aside, and the family was quieted with the assurance that it would soon pass over, yet, as the bowels had not moved, an injection was ordered. Soon after, the child went to sleep, occasionally woke with a cough, and the next day was cheerful again, and without any untoward symptoms. In consideration of the fact that, according to Homœopathic experience, the effects of *Calcarea* continue for fifteen days, I gave no more of it, and the child improved from that very day, to use the words of the family, from hour to hour, so that even this Homœopathic observation proved itself to be correct.

I have observed and studied many diseases of the lungs, and, as often as the lungs were filled with mucus, in whatever extent, from whatever cause and in whatever form, it was always an unvarying rule, that improvement and cure were observed the sooner, the more abundant the expectoration was. In this case it was different. Here, after the effect of the *Calcarea*, the cough and expectoration dimin-

ished in the same ratio; since every day from this date, the râle in the chest had a finer crepitus, and became less; indeed, the cessation of the cough and the expectoration even, preceded that of the râle, with constantly increasing sense of improvement and rapid progress towards recovery. As early as the 8th of September, the child began to smile again; could be kept in bed no longer, and commenced to play, as it did when well. Its appetite increased so that on the 10th of September they were obliged to give it milk and soup, and had to be careful in satisfying its great longing for food. On the 12th, I found it all dressed; on the 18th, it was carried into the open air, and nothing more abnormal was noticed in it, except a peculiar fear of the shadowy forms cast by the candles, which I had to ascribe to the continued effect of the Calcarea, and this also disappeared after a few days.

I remember no other case in which every new day brought me a new surprise. In it, none of my previous Allopathic experiences were sustained; events followed upon events, all of which projected themselves far beyond the range of my vision, into regions of cause and effect entirely unknown to me. These drugs, Aconite, Belladonna, Calcarea carb., developed powers before my eyes, which I never dared to dream of ascribing to them. Used, by me, for quite other purposes, heretofore, according to the precepts of my school, they afforded, in this case, complete help, and that, too, in a dose which, according to the doctrines of the Universities, is declared to be totally inert. This, again, shook my confidence in these doctrines.

§. 262.

On the 12th day of September, I was called to see R., a landed proprietor in the neighborhood of Ansbach. I found a vigorous man of fifty years, with a red face, and constant complaints and groans, expressive of the severest pain. In consequence of taking cold one night, he was, as they told me, suddenly attacked with insufferable pains in the whole right lower extremity. The latter was of a bright red, and the whole limb was so swollen that the knee was not to be distinguished. The touch, not only of the hip, knee, and ankle-joint, but of any other part of the limb, occasioned acute pain, without leaving any impress of the finger; the scrotum was swollen; these pains were said to extend themselves into the abdominal cavity, also; moreover, there was sleeplessness, tossing about, loss of appetite, a pulse of 100, thirst, sense of coldness from the calves to the toes, though these parts, as well as the whole extremity, were hot to the touch; the

organs of the chest were sound; there had been one diarrhœic discharge the night before, the result of a dose of Glauber's salts.

While I was considering with myself whether I should order Tartar emetic, Quinine or Calomel, in large doses, or Colchicum with Opium, or blood letting, and no course gave promise of a sure result, I happened to think of Aconite, also. The extraordinary result in the previous case, justified me in relying upon the excellence of the preparation, and the symptoms which presented themselves determined me to choose Aconite as the most suitable and promptly acting remedy, according to trustworthy Homœopathic assurances. As I read over the prescription again, which was half a grain of Extract of Aconite in four ounces of water, a spoonful to be taken every two hours, and compared this with the disease; an extended, severe, and consequently, dangerous acute articular rheumatism; all sorts of doubts arose again within me, as to the prescription. However, even after the lapse of a few hours, I could make an assault with the Allopathic fire and sword, and all in good season, if it proved necessary; nevertheless, I added to my prescription the direction that, provided the pains remitted within two or three hours, a teaspoonful should be given every three hours only; otherwise I was to be informed at once. No one came. The next day the patient greeted me with the words: "You made a capital hit;" adding, that by the end of two hours, the pains had become endurable, and permitted him to sleep all night, with moderate perspiration; the inspection of the extremity, *mirabile visu*, showed that the swelling had gone down so much that the limb hardly appeared larger than the other; all the joints, presenting a normal color, condition and function of their integuments, were quite distinguishable, and only a little painful on motion. The solution of Aconite was given less frequently. On the third day, his wife appeared with the news that he had slept well every night, had already passed four hours out of bed; wished to know what he might eat, and declared that I need not trouble myself any more about him, but that she would bring me news of him every day, as long as I thought necessary. The cure progressed rapidly; after six days there was only a little sensitiveness in the ankle, when stepping upon the foot; nevertheless, the patient went about his estates without injury, as I finally observed for myself; an event which, in the most favorable cases, under my former treatment of this disease, according to the old school, would have required quite as many weeks.

§. 263.

I at once subjected all patients, who had been declared incurable by myself and other Allopaths, to Homœopathic treatment, and the results thereof were more than encouraging, they were calculated to excite enthusiasm.

But now, most depressing in such experiences, was the thought that many of my patients of earlier years, most surely, would not have died, had I heard, at the Universities, something of the blissful doctrines of Homœopathy. That was so far from being the case, that all students were assured that Homœopathy was madness, as they are told to this very day. A medical Counsellor of State and Clinical Professor did not hesitate to say, but a few years ago, in his Clinic: "It is shown, by statistical documents, that Homœopathy gains larger and more favorable results than we—but, as a matter of principle, we dare not allow it to gain ground."

On the other hand, upon the ground of the previous investigations, I summon *every* physician, who seeks to pursue his calling, that of relieving suffering humanity, without any secondary end, and who *must* thus pursue it, I summon him to his duty, not only to study the impregnable doctrines of Homœopathy, but also practically to prove them, and, for this purpose, to begin at least with those of his patients whom, according to the school, he must consider incurable. If he fails to do so, he is either an imbecile or lacks conscience, and the law can not get hold of him, merely because the statute-books contain nothing about the truth of Homœopathy. The statute-book of Humanity, however, exists for every physician, although without any political force.

These three examples also suggest other causes of the *so-called Homœopathic aggravations*, besides those announced in §. 248 and others later again in §. 284. Even these facts which we observed to occur from the too powerful effect of *Carbo vegetabilis* and *Calcarea carbonica*, find their explanation in the circumstance frequently spoken of, that these attenuations operate constitutionally, *i. e.*, upon the conditions of the disease which are presented within the organism, and are capable of changing the same in a *specific* manner, as is wont to be the case, also, under the action of morbid matter.

It is just the kind of Homœopathic aggravations which occurred in these examples, that drives the beginner to the use of still smaller doses, and, indeed, on the same ground from which chemistry discovered (v. §. 221) that one has to begin his experiments with the smallest quantities, provided he would avoid undesirable effects.

Would any one think it possible that this procedure of Homœopathic practice is scouted by the very ones who do the same thing themselves? §. 230.

§. 264.

For Psychology, Homœopathy has opened a wide field of positive experience. Homœopathy, first of all, has shown that health, as well as disease of the mind, depends entirely upon the quality of the material elements of our body. As the vegetable organism becomes sick, when it can no longer appropriate to itself the materials of its existence, so does the organism of the mind, when it is not furnished any longer with its necessary supplies. That mental alienation has its origin in an abnormal connection of the organs and substances of the human body, is demonstrated to every Homœopathist, by every Homœopathic treatment of mental diseases, and that the sexual life is here the most frequent cause, the results of lives unregulated in this respect, demonstrate. The greater part of mental diseases find their source in this latter, whether it be by the equalizing of male and female contrasts, as is manifested where near relatives intermarry, §. 29, whether from personal excess or from the consequences of diseases of the genital organs; thereby the man of strong and impulsive feeling (*Gemüthsmensch*), with all his passions, always gains the preponderance over the cerebral or intellectual man (*Verstandes mensch*), and this may be innate, even.

How many young girls become insane from anomalies of menstruation; if this is retarded, *Pulsatilla* generally cures; if profuse, *Sepia*, etc. We know the mental diseases and pathological processes in the brain and spinal marrow, consequent upon Onanism. No physician will succeed in curing them, as long as they remain curable at all, without *Platina*. Imbecile children, even, can be cured all the easier, the younger they are taken in hand. Here, as I learned, as physician to the Institution for Imbeciles in Neuendettelsau, the measuring of the dimensions of the head, in all directions, is indispensable for an indication, and demonstrates, to the ignorant or skeptical, the importance of *Cranioscopy*, in establishing the indication. It is extremely interesting to discern, by such measurements, what organs of the brain in one imbecile child, are retarded in their development, and what, in another, are prematurely developed. If one treats his patients according to these experimental results, by the precepts of Homœopathy, results will follow which, to the non-Homœopathist, will be most wonderful. Hence, it may be concluded, that all *psychical peculiari-*

ties, which accompany diseases of adults even, belong to the diagnosis of the bodily constitution, and must be of essential influence upon the indication, for which, likewise, the Homœopathic drug-provings give us the key.

I will here relate a practical case, belonging in this connection.

Some time ago, nurses were guilty of the crime of giving children Opium, in order to produce sleep. Now, for the same purpose, they titillate the genitalia of children. Boys especially, hereby, involuntarily become onanists. Only, when the children begin to walk, it is sometimes noticed, for the first time, by watchful parents, that they attempt, in the most various ways, to rub their genitalia. Since, however, they do not always use the hands for this purpose, it is often not noticed for a long time, and only the results of this vice afterwards, in later years, induce the parents to consult a physician.

Thus, among other cases, and these become more frequent every year, I had to examine a boy eleven years old, because, I was told, he always acted like an imbecile; now laughed, now cried, without being able to give any reason for it. As soon as he is not observed, he seeks to rub the genitalia against tables or chairs, or in any way, even against the thighs. This he pursues with such a passion, that he gets angry and cries, whenever he is prevented from so doing; hence, he has to be kept constantly under the eye. He was no child like other children; he never played or took any interest in those of his age, was always absent-minded and forgetful, did not hear what was said; was seldom induced to speak, and when compelled, only answered a word or two, whereupon he forgot, right away, what the question was. He also made all sorts of grimaces, distorted his eyes and mouth; suddenly raced about the room, with all sorts of gesticulations, then sat down again, relapsed into a stupid mood, or whistled or sang to himself.

Irritable and very easily aroused, he was most quiet in the open air. Whatever was taught him, had to be taught mechanically, but above all things, of whatever he read, he could relate nothing. At the same time, he had no confidence in any body. Every one was indifferent to him, he showed an inclination to no one, and was in the highest degree timorous and distrustful. His hunger could hardly be appeased, and he slept, if not disturbed, unusually long. At the same time I observed, after watching him a long time, that he was always more indolent and acted more peevishly and ugly one day, than the other, on which account I forbade that he should be punished, on his bad day.

To this child I gave, according to the law of similarity, *Platina* 30, four or five drops night and morning. In a very few days, everything

improved for the better, and the Platina was discontinued after having been given in this way for eight days, in order to let it produce its entire effect. Hereupon, however, the old vices made their appearance again in a few days. Nevertheless I continued in this same way, and gave the Platina 30, for eight days, and then discontinued its use for eight days, and afterwards for a longer time, and then had the satisfaction of curing this child so completely in the course of four months, that he was freed from his unnatural sexual passion, even. Just in proportion as this declined, all his intellectual functions were brought up to their normal state. This, every skeptic can imitate, and the result will release him from his subjectivity.

§. 265.

A text-book of Homœopathy must not only unfold the whole theory, but also corroborate it by the most manifold practical illustrations. Now, a Homœopathist of the present day, comes into various situations even, which bid him yield, on one side or the other, and he can not always hold fast to his principles, because the external possibility thereto is lacking, viz.: a Homœopathic Pharmacy. Nevertheless, it can easily be shown that the Homœopath, under all circumstances, can always, beyond any comparison, accomplish infinitely more than the Allopath.

I must give a practical example of this also, in order to show the irrepressible might of Homœopathy, even under circumstances which might be discouraging.

I was obliged to undertake the treatment of a patient, Allopathically; why, it matters not. I remark only that I could not bring myself to refuse such a request, silly and capricious though it were, lest I should expose a human life to danger; besides this, under Homœopathic treatment, the "plebs" which is to be found in all classes of society, understands nothing but the use of the minimal dose, the efficacy of which it cannot comprehend. §. 4.

But, even under the compulsory use of Allopathic doses, the Homœopathist knows how to ward off a multitude of evils, and is, at the same time, much surer of the most favorable results, where the Allopathists, long before, had been compelled to give up all hope.

The patient was forty years old, of a powerful musculature, healthy from his youth, and had lately taken a cold. For the last six days he had complained of weakness of the limbs, confusion of the head and incapacity for any work.

On the seventh day of his disease, at which time I took him in charge, his pulse was 102; the temperature of the axilla 39.2° Cels. In addition to this, there was loss of appetite, much thirst, sour eructation. There was a circumscribed redness on the cheeks, the respiration was shortened, his tongue coated white, the skin dry, yet not very hot; he was lying rather apathetic, slept much, and always kept himself well covered, because he was easily chilled; his lips trembled when he spoke; he had cold hands and feet; coughed sometimes without expectoration or pain; the irritation to cough was under the sternum, yet bronchitic rhonchi were audible all over both sides of the chest on auscultation. The abdomen was soft, the cœcal region free from pain, the stool withheld, the dark-red urine without albumen, depositing a precipitate of uric-acid crystals.

Although there was no Roseola present, I yet thought that I could not diagnosticate an Ileo-typhus, but rather an exanthematic, for this Roseola appears upon the skin only in epidemics, often at the very beginning of the disease.

Under such circumstances, which were not perfectly clear, I was obliged to resort to all sorts of diagnostic means which science could offer, hence, to measure the temperature daily. For this purpose every physician, no doubt, has lithographic charts in readiness. Since now, the temperature on the morning of the 8th day was 38.3° C., and at evening again only 39.2° , the case seemed to be a moderate form of that disease, which, according to the doctrines of the physiological school, does not yet require any therapeutic interference.

Though the temperature on the morning of the eighth day was only 38.1° C., yet this case no longer seemed to me a moderate one, because the pulse had nevertheless risen to 112. Whatever might have been indicated Homœopathically, I could not prescribe, for the reason that no Homœopathic remedies were at my disposal. Hence, for the present, I wished to neutralize at least the acid in the intestinal tract, according to Rademacher, and ordered half an ounce of Kali carb. in five ounces of water, of which a spoonful was to be given every hour; as nourishment, only barley water.

Now the degrees of temperature were more favorable, as the accompanying table shows, but otherwise no improvement ensued; there was a mere pause in the disease, and no aggravation till the eleventh day, when the expected remission did not appear, and, moreover, violent diarrhœa set in. The strength of the patient decreased sensibly, he began to lose flesh and to be soporous, till, on the thirteenth day, the high evening temperature, 39.8° C., indicated an exacerbation, which was the more significant as, just before the temperature was

taken, the patient had had a violent chill, which had lasted more than an hour.

On the morning of the 14th, together with a diffused bronchitis, an evident enlargement of the spleen could be diagnosticated, and with the cough, moderate as it was, bloody sputa were expectorated; the pulse was 124, with a weak stroke of the heart. The diarrhœa and the soporous condition had increased, and were accompanied by muttering delirium; the abdomen had become meteoristic, and there was marked difficulty of hearing; also a circumscribed deep redness upon the cheeks, which were hot, while the rest of the countenance had a yellow cast; the tongue was coated black. I prescribed Acid phosph., five drops in four ounces of water, a spoonful to be given every hour.

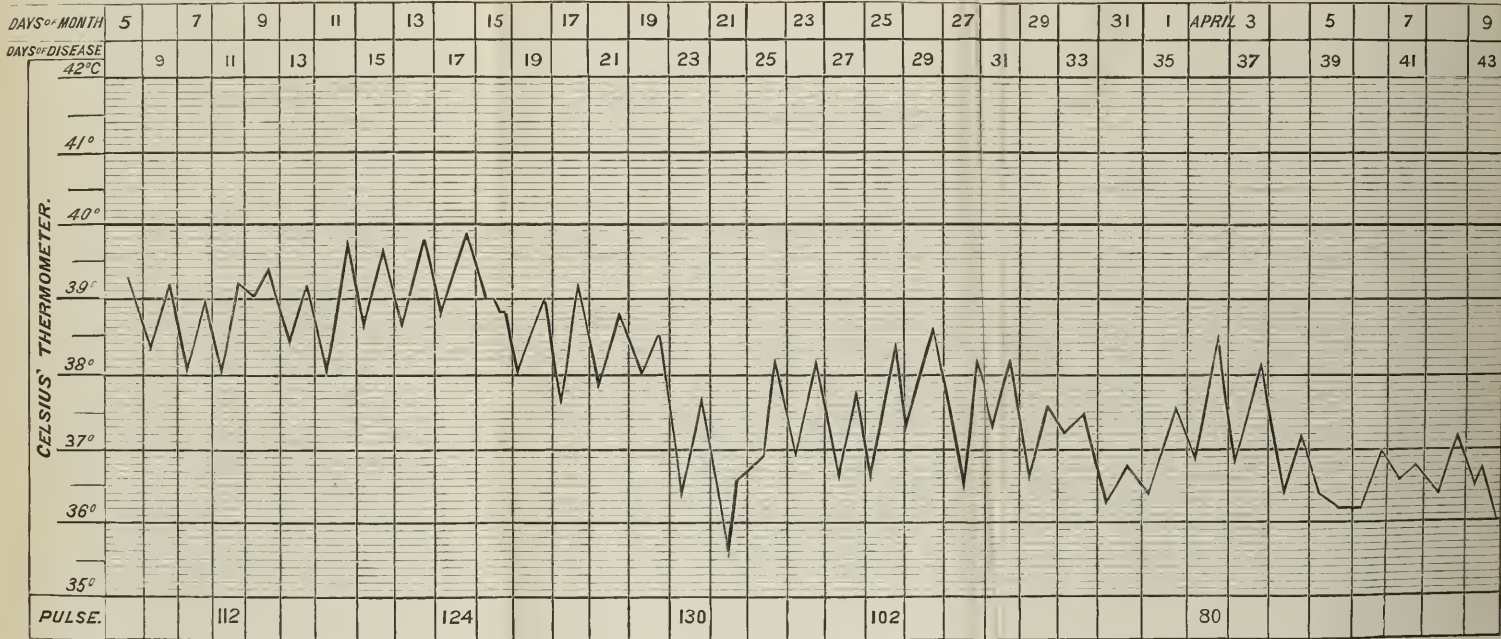
Now, it is true, a remission of the fever ensued, but, on the evening of the fifteenth day, instead of the usual remission, the patient had a chill, after which sweat broke out, which lasted two hours.

As, on the 15th day, the temperature had risen to 39.9° , the bloody expectoration continued, the skin, since the last sweat, remained dry, since, also, for three days he had not had an hour's natural sleep, and the patient could no more be aroused from his unconscious murmurings, since the hands and feet had remained cold, and the finger and toe-nails became blue, the breath had a putrid odor, and now Roseola really presented itself on the arms and legs; Quinine was ordered, five grains with five drops of diluted Sulphuric acid, in five ounces of water, a spoonful to be given every two hours.

Hereupon the most decided indication of improvement presented itself, a fall of the temperature, between the evening of the 16th day and the morning of the 17th, and a gradual sinking of the same still continued on the evening of the same day, and without intermission till the morning of the 18th, when it was 38° . The stools and urine, however, were passed in bed unconsciously. Quinine was continued, and, for nourishment, an almond emulsion and the yolks of two eggs.

On the 19th day, the morning temperature sank again from what it was on the 17th, the perspiration being at the same time abundant; the bloody sputa had also ceased.

From this time, the temperature sank, as the table shows, but with a constant increase in the frequency of the pulse, till it reached 130, and, on the morning of the 23rd day, the temperature had reached 35.6° C., which was all the more to be considered as a collapse, as at the same time, all the other symptoms were aggravated, the pulse became dicrotic, and finally small, and could not be counted, the stroke of the heart became enfeebled, and an erysipelatous bed-sore had formed upon the left shoulder, the sacrum and the two hip joints, while several of



the Roseolæ had enlarged their areola, and their centres were covered with dry, bloody incrustations.

What now? What Allopath would not be utterly helpless in such a case, and declare the patient lost beyond all doubt?

The Homœopathist does not give up any patient, as long as he still breathes, for the higher the difficulties rear their heads, the more earnest is his zeal for the delivery of the patient. The consciousness of his superior power holds him up; a power which rests upon the law of similarity, upon a law of nature, upon a rock, whence flow thousands of healing springs.

But he weighs every single symptom in the balance of his knowledge and experience; the index of this balance turns for every symptom, however trifling it may seem, distinctly, clearly and intelligibly.

Just such cases present the strongest proof that the diagnosticated localization of the disease, and the name which the physiological school bestows upon it, are of no more avail, than a straw to a drowning man. Or is it possible, that we could gather an indication by measuring the temperature? Nothing of all this presents an indication, and, least of all, an essential indication; all this leads the physiological school only to *experiments*, which surrender their patients to *mere accident*. Hence, not only in such cases as this, but in all cases, we must utterly reject the speculations and ideas of the physiological school, and rely upon observation and comparison with Homœopathic drug-provings, according to the law of similarity.

This patient, fatally ill, presented, aside from the other symptoms which have been given, the following, also, which the adherents of the physiological school can not explain: *Constant trembling of the hands; utter insensibility of the body, except a sensitiveness to a lowered temperature, even from removing the clothes, when dressing the bed-sore; the bed-sore on the sacrum became black and hard, the countenance of the patient was rather yellow, his cheeks less red; he lay in a profuse sweat, which stood on his face in drops; at night, he was very much excited and murmured constantly; nothing but shaking would now arouse him from this sopor, and scarcely had he opened his eyes before they would close again, and the eyes, when opened, were very sensitive to light and were bathed in mucus. It was necessary in the month of March to leave a window open, day and night, for, when it was shut, the patient became restless. His deafness was complete, the sense of smell was blunted, the lips and nails were blue; the tongue was dry and hard as a chip, and black, as were the teeth; speech was impossible; although he took the drink offered him as if involuntarily, though greedily, yet he clearly refused it, when it was*

not sweetened with sugar; he was most fond of plum-sauce, though swallowing was difficult; any voluntary motion of the body whatever, was for a long time impossible for him; the stools and urine still passed unconsciously and uninterruptedly; the respiration was still oppressed, and sometimes interrupted by cough.

The observation of all these symptoms would render it entirely impossible for any physician of the physiological school to frame an indication which should permit him to foretell a very favorable result, while, to the Homœopath, it offers the most powerful points of support to this very end.

Only he who can rightly estimate the Homœopathic drug-provings, will know that *Argent. nitr.* is indicated by these symptoms, and every Homœopath who has made the physiological and pathological significance of these drug-provings his own, will know that the drug-provings with *Argent. nitr.* similarly point to the affection of the medulla oblongata and medulla spinalis, precisely as these symptoms of this patient, just detailed, do.

This medicine, however, I could not get from a Homœopathic Pharmacy. Hence I ordered *Argent. Nitr.* half a grain to four ounces of distilled water, one spoonful to be given every four hours, and, on account of the above-mentioned reasons, in alternation every two hours with the solution of Quinine already prescribed.

Now, on the same day, the morning temperature was 35.6° , that of the evening 36.6° ; the next morning, the twenty-fourth day of the disease, 36.9° in the morning, and 38.2° C. in the evening.

In the same degree (for one cannot speak here any longer of deferescence indicating improvement,) but, with increasing temperature, all the symptoms were relieved without exception. The pulse on the twenty-fifth day, was suddenly and distinctly 102 again; the stroke of the heart was more vigorous, the rhonchi in the chest were reduced to a minimum, the patient was awake and answered questions put to him with a nod, or negatively with a sidewise motion of the head; moreover, on the next day, the twenty-sixth, the diarrhœa, continuing to this time, had ceased, the abdomen was sunken and soft. From the evening of the twenty-eighth to the morning of the twenty-ninth, surely enough, a so-called critical motion manifested itself, after which the temperature of 38.6° , which was the highest point reached, did not return again, and the next morning it fell again to 36.5° .

For the last three days, the bed-sores on the left shoulder, on the sacrum, on both hip joints and ankles, were rubbed twice every day with Arnica oil, which was prepared with one part of Arnica root to six parts of olive oil, digested four days in a moderate heat.

The Argent. nitr. was now given, one grain in five ounces of water, only morning and evening, and without alternation with the Quinine. The whole night through, he enjoyed a deep refreshing sleep, and, for the first time, without any disturbance or delirium.

On the twenty-ninth, the patient could speak distinctly again; he wanted pickled veal and wine, which was given him without hesitation. On the thirtieth, he wished to eat more than three times a day, and had two pints of wine. He neither passed his feces nor urine involuntarily any more, and called for the vessel again whenever it was needed.

Up to this time, I had taken no interest as regards examining the urine; but now I wished to discover the quantitative increase of Chloride of sodium and urea in the urine; the quantity of urine passed in forty-eight hours was 700 cubic centimetres; the specific gravity was 1.024; the reaction was acid; this quantity of urine contained 1.26 grammes of Chloride of sodium and 18 grammes of urea.

The thirty-first day of the disease, temperature at 36.6° ; pulse 90; convalescence was fully established, and the patient wanted beer instead of wine. Munich Bock-beer was given him, and Argent. nitr. was no longer administered.

On the thirty-sixth day of the disease, on which the cure was complete, the urine, for the first time, was neutral; its quantity amounted to 1.920 C. C.; the specific gravity 1.016; Chloride of sodium 13.44 grammes; Urea 37.44 grammes; pulse 90.

I herewith subjoin the quantity of the urea and Chloride of Sodium, as compared with the increasing strength of the patient:

<i>Day of Convalescence.</i>	<i>Amount of the Urine.</i>	<i>Reaction.</i>	<i>Sp. gr.</i>	<i>Chloride of Sodium.</i>	<i>Urea.</i>
1st.....	1040 C. C.	Neutral.	1022	9.36 gr'm.	28.08 gr'm.
2nd.....	2400	"	1014	19.2 "	38.4 "
3rd.....	1600	"	1020	2.04 "	24.48 "
4th.....	1900	"	1019	1.9 "	45.6 "
5th.....	1350	"	1021	13.5 "	36.45 "
6th.....	1600	"	1016	14.4 "	23.6 "

As regards the pulse, from the thirty-sixth day forward it varied only between 80 and 76; while the patient improved visibly from day to day. Hence it follows, that the great variations in the temperature, in the quantity of Urea and Chloride of sodium, were of no diagnostic worth, and still less could give occasion to a renewed medication; for all these natural events, gathered from experimental investigations, had to retire into the background, before the symptoms of convalescence

and returning strength, which, nevertheless, continued to advance; hence, again, it follows, beyond contradiction, that the other symptoms always are, and continue to be, the decisive momenta, and that Hahnemann has indicated the only sure way, which holds good for all cases; for, while the technic experiment may well be esteemed as valuable, yet it may lead astray those practically unskilled.

If we now follow the epicrisis of this disease further, the question arises, was he treated Allopathically or Homœopathically?

The so-called expectant method, which had to be pursued at first, under the limitations already mentioned, was purely Allopathic; for the Homœopathist does not wait for the so-called decisive symptom; but, to him, every single symptom, from the first day forward, is decisive for the establishment and execution of a correct indication. In a Homœopathic sense, the treatment in this stage could necessarily only pass for palliative merely.

The Allopath, the adherent of the *predominant* physiological school, practices expectation only, because he does not know how to undertake anything curative. In the decisive moment, for which he thus waits, as if for an excuse, he is hence none the less embarrassed; thinks, however, that for the sake of his honor, he must interfere. However unsuitable this interference may be, as the experience of every day teaches, at least let it produce some effect. The entire sum of the procedures taught him must be set in operation, that, finally, he may have the excuse left, that "*everything* has been tried in vain."

In this category, also, belongs the palliation with the Kali carbon, which was necessary under the prevailing circumstances. But where the Homœopathist has his powerful remedies at hand, he is not obliged to neutralize the acid in the intestinal canal by direct means, because he knows that, by following an essential indication, the formation of the acid ceases, according to the law of the reciprocal action.

The Homœopathic treatment could first be commenced when the indication for Phosphoric acid occurred, since this medicine could be procured from an Allopathic apothecary; for this indication was established, according to the law of similarity. The same is true as regards the indication for Quinine. Yet these two remedies refused their favorable effects, because they were not given in a Homœopathic dose, while otherwise the Phosph. acid would have made the Quinine superfluous, and this surely would also have made the Argent. nitr. superfluous. The Argent. nitr. in Allopathic doses, nevertheless, was able to act as if it had been given in a Homœopathic dose, since all its parts, which formed combinations by direct contact with albuminous bodies, must needs be without effect; while other parts might have

been produced, changed into the insoluble Chl molecules thereof, capable of absorption, have been taken up and carried farther by the blood, so that the cure was not produced by the Nitrate of silver but by the Chloride.

Thus it was Homœopathy, simply and solely, that saved the patient, in spite of the Allopathic dose, for Argent. nitr. , as every one will acknowledge who is familiar with the provings of this drug, was indicated and prescribed according to the law of similarity. Physiological medicine, even, sometimes happens to think of giving Arg. nitr. in typhus, even in enteric typhus, but without any definite rule. The first time it was accidentally *used* in typhus diseases, to the best of my knowledge, was about twenty-five years ago, in St. Petersburg, and, because it helped sometimes, it was very highly recommended, but, as it did not always help, it was forgotten again. But that cannot be forgotten which is founded upon natural law, to discover which, however, physiological medicine offers no guide whatever.

In this case, also, the incongruity of the pulse with the temperature is remarkable. The proportion, assumed by Wunderlich, between the elevation of the temperature and the degree of the frequency of the pulse, may thus hold good in light cases, but, in severe cases, and such as are deemed fatal, according to Allopathic knowledge, never. Even for Prof. v. Bezold, who says that, "for those who wish to come nearer to an understanding of the nature of *fever* by way of experiment, the fact that an automatic centre of heart-exciting nerves exists in the medulla oblongata, is of the greatest importance;" even for him, this clinical case might show that fever does not proceed from the heart or the medulla oblongata alone; for observations at the sick-bed are the only standards in practical medicine, before which the observations of experimental physiology upon animals, sink into utter insignificance.

At the same time, it is demonstrated that the consideration of *one such symptom alone*, as the state of the temperature, the pulse, etc., cannot under any conditions, justify a diagnosis, prognosis, or indication; but only in connection with the other symptoms.

If one, for example, reads in Wunderlich the treatment of petechial typhus, or of enteric, he will find that, in the latter only, Arg. nitr. is recommended in connection with narcotic remedies; Carbonic acid and Magisterium bismuthi, against vomiting and hiccough.

On the contrary, I know from many years of clinical experience, that, in every form of the various kinds of typhus, and in all of their stages, the Argent. nitr. offers no efficient aid, and that this aid is

looked for in vain, if it is not employed according to the law of similarity, and under the symptoms already announced.

The colossal therapeutical errors of the physiological school arise in great part from their tradition, above characterized, and are *diseases* which can be cured only by Homœopathic studies.

§. 266.

The Homœopathic drug-provings were at first undertaken by physicians, whose practice deprived them of the time to make examinations of the urine. Now-a-days, the qualitative as well as quantitative examinations of the urine, is rather an entertainment than a loss of time. As regards the quantitative examination of urine, we are indebted to Baron von Liebig for a method, which permits one in the course of a quarter of an hour, to determine the quantity of Urea and Chloride of sodium in the urine.

Since, however, in Liebig's paper on this method, no practical example is given, I must, on account of the importance of the subject, give one for imitation.

After the quantity of urine for twenty-four hours has been measured, which only takes the time necessary to pour it into a glass graduated to cubic centimetres, the specific gravity of the same can be read off at the same time upon the glass Urinometer, made and graduated for this purpose.

Now, two parts of urine and one of a solution of Baryta, prepared according to Liebig's direction, are mixed together, and the white precipitate of phosphates and sulphates, which will thereupon be cast down, may be separated from the fluid by means of a filtering paper, which has been previously weighed.

If we assume 20 cubic centimetres as one volume, then 40 cc. of urine must be mixed with 20 of the solution of Baryta.

Should the filtered fluid have an alkaline or neutral re-action, then it must be acidulated by dilute Nitric acid.

Of the filtered fluid, 15 cubic centimetres are now taken, which, since two volumes of urine and one of Baryta were mixed, correspond to ten cubic centimetres of urine. To this quantity a solution of Nitrate of mercury is added, drop by drop, from a burette furnished with a stop-cock, and graduated up to fifty cubic centimetres, in tenths, (the tube having been previously filled a finger's breadth above the fifty mark, with this solution prepared, according to Liebig, for *Chloride of sodium*.) and this is done till a permanent cloud is formed in the contents when stirred with a glass rod, since this mixture, at first,

becomes clear again on being stirred. Let us suppose that up to this point, 1.8 cubic centimetres of this solution of Quicksilver has been used.

Since now, 1 cubic centimetre of solution = 10 milligrammes of Chloride of sodium, then, after this cloud has been formed in those 10 cc. of urine, there will be 18 milligrammes of Chloride of sodium.

This gives, for the whole quantity of urine for twenty-four hours, suppose it to be, for instance, 700 cc.

$$18 \text{ milligr.} : 10 \text{ cc.} :: x : 700.$$

$$10 x = 700 \times 18.$$

$$10 x = 12600.$$

$$x = 12600 \div 10 \text{ milligr. of Chloride of Sodium, or} \\ 1.26 \text{ grammes.}$$

Now fill another burette, similarly graduated, with the solution of Nitrate of mercury, prepared by Liebig for urea. Of this solution, add to the residue of the fluid, just tried for Chloride of sodium (corresponding thus to 10 cc. of urine,) until a drop of the solution of Soda, prepared according to Liebig for this purpose, gives a yellow color with a drop of the solution on a watch glass. This color is an indication that enough of the Quicksilver solution has been added to the residue of the liquid tested for Chloride of sodium.

Then we read upon the graduated burette the quantity of the solution of quicksilver used for this purpose.

Let us suppose that, in the given example, 26 cc. of this solution of Quicksilver has been used in the experiment.

Since, now, 1 cc. of solution corresponds to 10 milligrammes of urea, so there are contained in 10 cc. of urine 26×10 or 260 (milligrammes) of urea; this, applied to the whole quantity of 700 cc., gives:

$$260 \text{ milligrammes} : 10 :: x : 700.$$

$$10 x = 260 \times 700.$$

$$10 x = 182000.$$

$$x = 182000 \div 10 = 18200 \text{ milligrammes of Urea, or} \\ 18.2 \text{ grammes.}$$

If, now, the filtering paper above used, and weighed with its contents, be dried and again weighed, then we have the quantity of the salt, by subtracting the original weight of the filtering paper.

These directions suffice for most cases, and the utensils needful for this purpose are to be had in Berlin at the firm of Warmbrunn and Guillitz, No. 40 Rosenstrasse; in Leipzig, at Franz Hegershof. Not only these, but all directions for the quantitative and qualitative anal-

ysis of urine are nowhere better, more completely and more intelligibly given than in the instructions on this subject by Drs. Neubauer and Vogel (Wiesbaden, Kreidel, 1863). Fehling's and other tests for sugar are also here described, for which, however, one must have on hand the separate ingredients, the Sulphate of copper, the Tartrate of Potash and the Soda ley, since they must be mixed fresh at every new experiment. The best way of all would be, and the surest, as I have found it, if each one would prepare his chemicals for such investigations himself, for which "the qualitative and quantitative analysis" of Fresenius contains the directions, for I have obtained at a celebrated chemical house, the solutions of mercury for determining the quantity of Chloride of sodium and of urea, but they were good for nothing. Even for testing the genuineness of such preparations made by others or by one's self, I advise each one to prepare his own chemically pure Chloride of sodium and urea. These have all become, at the present day, labors which occasion but little trouble, and are, rather, as before said, a diversion for those needing a change in their otherwise exhausting labors, as do all practicing physicians. For this, nothing more is necessary than once to learn the manipulation, which takes but very little time, and to procure the apparatus, which is now accessible to every one.

§. 267.

Let us now examine, also, various practical cases of our *opponents*, that we may test them by the laws already laid down, and, conversely, try how far these laws find their confirmation even in the experience of these opponents. Examples from the Therapeutics of the present day will be adduced, that, besides this object just stated, we may find opportunity practically to set forth further rules of Homœopathy. To make a nice selection, for such a purpose, would weaken the examples as such; hence, I give them as accident brought them to me when consulting authorities for my own practice.

These cases demonstrate to us that the laws of Homœopathy preside over the favorable results of all schools.

Upon the immunity of laborers in Anthracite coal mines against Consumption.—Monatshefte, 1858.

"Since the year 1818, the author has lent this subject his attention, and has not only convinced himself by facts that laborers in coal mines generally remain free from phthisis, but has obtained communications

agreeing herewith from other colleagues, who reside near coal mines. The same has been observed in England, in the mines at Newcastle; in France (Désèze), by Vallat; in North America, by Geddings; in Belgium, by various physicians; and by Lombard, in Geneva (*De l'influence sur la phthisie pulmonaire — Annales d'hygiène et de médecine légale*; tome XI.), who *arranges, in his statistical tables, coal miners, in general, in the class of those who are most protected from Phthisis, or even are entirely exempt from it.* The writer is unable to explain this phenomenon. Its explanation cannot be found in the manner in which these people live; for while, in this regard, they live just as those about them, who do not work in the mines, it frequently happens that these latter (their wives or children) *suffer and die with tuberculosis, while they themselves are untouched by this scourge.* This is all the more remarkable, as the very kind of their labor has, as a consequence, a number of influences upon their bodies which are otherwise recognized as predisposing elements, and as *causes of the origin* of tuberculosis, to which especially belong the abrupt *changes of temperature* to which they are exposed, when perspiring, on entering or leaving the shafts. The fact that the coal contains Iodine and Bromine, as has been lately demonstrated, can also hardly serve as a cause of their exemption from tuberculosis, since the Iodine is so combined with the coal that it cannot be volatilized. Another reason (adduced by Martens — and surely the weakest of them all.—*REP.*), is the much greater atmospheric pressure in the mines, in comparison with that upon the surface of the earth, the effect of which would be analogous to what is observed at the sea-shore, where, it is well known, Phthisis is more rare. But this reason, also, is disputed, and the fact adduced that, at a certain elevation above the level of the sea, Phthisis is hardly known. Finally, the uniform temperature of the mines (about 12–15° C.) is given as a cause. This, however, is far from being found the same in all the mines, and thus the aetiology remains quite in the dark, while the fact appears established all the same, and as such, is, in any case, of no small interest for the nosology of lung diseases (*Bulletin de l'Acad. Roy. de Belgique*; Tome XVI., No. 8).”—TUTSCHKE.

Upon the immediate cause of tuberculosis, and the specific remedy against the same, by Dr. J. F. Churchill.

The number of cases of Phthisis treated by the author, according to the method discovered by him, amounts to thirty-five; these were all in the second and third stages, *i. e.*, in that of the softening of the tubercle and the formation of caverns.

Of this number, nine were perfectly cured; in eight, the physical signs of tuberculosis disappeared; eleven were decidedly improved; fourteen died, and one is still under treatment. The conclusions, which he thinks himself justified in drawing from his observations and experiments, are as follows: The immediate cause, or at least the essential condition of tuberculosis, is the *decrease of Phosphorus* in the body, where it is found in an oxidizable state.

The specific remedy for this disease consists in the use of a preparation of Phosphorus, which has the two-fold property of being immediately assimilable, and, at the same time, of being in the lowest possible degree of oxidation. The *sub-phosphates of Soda and Lime* are the preparations which, thus far, seem best to unite these two conditions.

Each of these salts can be given without distinction, in daily doses of from fifty centigrammes up to three grammes (8 to 48 grains) in the treatment of phthisis. The largest dose, as a rule, to which the author adhered was one gramme (16 grains) a day for an adult.

These preparations have an *immediate effect upon the tuberculous diathesis*, and with a truly *wonderful* rapidity cause all its peculiar symptoms to disappear. If the morbid deposit, the special result of the dyscrasia is recent, the softening has just begun, and does not make rapid progress, then the tubercles are absorbed and disappear without leaving a trace behind.

If the deposit is of an older date, and if the softening has reached a certain degree, then it progresses sometimes in spite of the treatment, and the termination of the disease depends upon the anatomical state of the injury, upon its extent, and, quite especially, upon the presence or absence of complications. Numerous experiments, with inspiration of various substances, in order to modify the local condition, have produced no favorable result that should not have been ascribed to the general treatment.

The physiological effects which were observed upon the use of the sub-phosphates of Soda, Lime, Potash and Ammonia, are of two kinds. On one side *they immediately increase the nerve force, and on the other they are remarkable remedies to promote the formation of blood*, far surpassing all others as yet known. They possess, in the highest degree, all the therapeutic properties which the older therapeutists were wont to ascribe to Phosphorus, and bring with them none of those dangers which have well-high consigned this remedy to oblivion. Without doubt the Sub-phosphates will, in future, take high rank in Therapeutics (L'Union Medicale, No. 98.) — TUTSCHER.

Two cases of Pulmonary Tuberculosis cured in the colliquative stage.—Monatshefte, 1858.

“The first of these two cases was that of a man, 34 years of age, whose disease of the lungs dated back about fifteen months, and, according to all indications, had advanced to the last stage. Although, at this point, no favorable change could be looked for, yet the author thought it to be his duty to do his best towards alleviating the present suffering, and thus undertook to relieve the *febrile attacks* which so harassed the patient, *as well as the tormenting cough*, and to procure him at least a few hours’ sleep. For this purpose he gave him, *every hour*, a grain of Quinine, and in connection with this, every two hours, one-sixth of a grain of Morph. acet., and one-third of a grain of *Digitalis*, with directions to double the dose of Quinine an hour before each attack of fever. The next night, the patient slept a few hours at least, the cough being somewhat harder in the morning only, though not so much so as on the previous days. Contrary to all expectations, there *was no chill on the morning of this day*, the patient having taken eighteen grains of Quinine, so that, at noon, the author found the patient full of hope, the more so, as both the expectoration and the diarrhœa were manifestly relieved, and the difficulty of swallowing and the thirst were diminished; on the other hand, an increased diuresis manifested itself; the bed-sore, for which the author had used an ointment of Plumb. nitr., was much less painful, and he could lie for a time, at least, on the right side, which heretofore had been impossible, on account of its producing cough and attacks of suffocation. Under the continued use of the above medication, *the evening attack of fever, though occurring at the usual time, was much feebler, both in extent and severity*, and it was especially followed with but little sweat. On the third day, on which the bed-sore was already dried up, and the patient, for the first time, had taken soup again with appetite, *there was no febrile attack at all*; the nights became entirely quiet, the pulse sank to 95, the diarrhœa had ceased, the expectoration was very slight, quite inodorous, readily detached, and more like mucus mixed with saliva; the râles diminished sensibly, the walls of the throat presented no more vesicles, and the ulcers already present began to cicatrize. Now the Quinine, with the Morphine and *Digitalis*, was given every two hours. The improvement made marked progress; the appetite, as well as the strength, increased daily; there was one pappy evacuation of the bowels every day, the abdomen was

soft, without pain; the sweats had ceased entirely; the nights were passed in sleep; the cough was seldom, most frequent in the morning; the expectoration was extremely moderate, and more catarrhal; the pulse had fallen to 90, and finally to 76, and there stopped.

At the end of twenty-one days, during the last eight of which the above powder had been given only every three hours, while, as the digestion was good, a tea-spoonful of *Cod-liver oil* had been given morning and evening, the bronchial respiration was only to be heard in a small spot in the region of the second rib, while, on percussion, the sound about this place was much more hollow. The patient, who already had visibly increased in strength and flesh, could sit up in bed for an hour and more at a time; a *slight œdema*, however, was formed about the ankles, on account of his legs hanging down, which soon disappeared again, when resuming the horizontal position. Lying on the right side, however, still produced laborious breathing and cough. Not till the end of the sixth week, during which the powders had been reduced to three a day, while the dose of the Cod-liver oil had been gradually increased to one and a half table-spoonfuls twice a day, could the patient lie on both sides without pain; every trace of bronchial respiration, as well as every râle had disappeared; the appetite, digestion and sleep were excellent; the weight of the body had sensibly increased, the cough was very seldom, indeed, and brought up only a white, foamy secretion; the greater part of the day could be spent out of bed, and in the first days of December, on a fine, sunny day, he made the attempt, about noon, to enjoy the fresh air, which was accompanied with the best result. In the course of a year, the patient, having ceased to take the powders by the end of December, but continuing to take three table-spoonfuls of Cod-liver oil, and often more, a day, had regained his former size, (he had been tolerably robust,) and since that time, that is, for seven years, he has shown no trace of his previous disease, although, for the last four years he has again indulged his passion for *smoking*, as before his sickness. The only trace of his former disease now, is a depressed portion of the thorax, giving forth an hollow sound on percussion, and presenting no respiratory murmur.

The second patient was a sailor, much given to drink, who had also arrived at the last stage of pulmonary tuberculosis; he had first used, for three weeks, a solution of Sugar of lead, gr. vj. in 4 oz. of distilled water, with Acet. morph. gr. j., and some drops of distilled vinegar, *which quieted the diarrhœa; the expectoration also diminished* and was *made much easier*, especially by the aid of a mixture of equal parts of Anodyne liquor and Oxy-mel of squills; the morning sweat

ceased; the nights became more quiet; the patient found himself refreshed by sleep continuing for hours; auscultation and percussion showed that, after the course of the above-mentioned time, the destructive process in the lungs had made no progress; while, on the contrary, the râles had signally decreased. Under the previous use of good mucilaginous broths, and broth injections, to which the yolks of eggs were added, the tongue had lost its bright-red look, and indications of returning appetite presented themselves. The *œdematous swelling of the feet and the face* also had considerably decreased. Quinine was given now, four grains at a dose, with one-sixth of a grain of Acet. morph. every two hours; and subsequently, when the digestion had become somewhat stronger, and the patient was able to bear a light milk diet, Sulph. ferr., gr. j. *pro dosi*, was added. During the use of these remedies for six weeks, the patient visibly improved; the œdema had left his face and feet entirely; the stools occurred daily, and were of pappy consistence and normal color; the secretion of urine increased as the thirst decreased; the cough occurred only now and then, three or four times in twenty-four hours; the crepitant râles were entirely gone; the bronchial respiration had also sensibly diminished, and was now only to be heard over a much smaller portion than before. Now, as the patient already bore roast meat and wine-soup very well, the *Cod-liver oil* was given, two table-spoonfuls a day, while only four of the above powders were given in twenty-four hours. After six months, that is, in the spring of 1851, the patient, who now passed hours out of bed, coughed little, and had almost no expectoration, might be considered as cured, and all the more as every trace of bronchial respiration had disappeared from the left side, and only the depression of the chest, at about the second rib, as well as its quite hollow sound, gave evidence of the previous disease there, and the tuberculous process on the right side, also, might be considered as checked. In the course of the summer, the patient recovered so far, under the continued use of the Cod-liver oil, that he regained his previous fullness of habit; and, as early as July, worked again as a sailor. Since that time, this man, whom the author last saw but three weeks ago, although he indulged his passion for drink, when not on shipboard, as before, remained, nevertheless, perfectly well, and regained and kept his previous robust and almost muscular appearance.

Although cures of tuberculosis of the lungs, according to evidences presented upon the *post-mortem* table, can no longer be numbered among impossibilities by physicians who are familiar with the progress of science, especially when the tuberculous process begins at a late period of life, and is not too rapid in its course, yet these two

cases deserve especial consideration, since it is possible, even after so many years, to establish the result of a treatment, commenced under such inauspicious symptoms, and, in the second case, carried on under such injurious external influences; and even if we should be compelled to admit that the tuberculous process was only stayed, and not at all cured, yet the staying, for six and eight years, of so fearful a disease, is a phenomenon all the more worthy of regard, as both patients, after their recovery, abandoned themselves again to those injurious influences which contributed much towards the development of the disease; and as, notwithstanding this, no indication of any re-appearance of the deleterious process has shown itself. The author deems it in place to add, yet further, that he has had repeated opportunities to test the good effects of the Sulphate of Quinine, as well as that of Sulph. ferri, in connection with the Acet. morph. and Cod-liver oil in tubercular processes of the lungs, especially in his practice among the poor, where such cases are so abundant; and although a cure has not always resulted, yet he has often succeeded, and this under the most unfavorable external influences, in keeping such patients alive, much reduced as they were, and in so relieving them, that they could earn their daily bread. But this method of treatment is practicable only in that species of the disease *which is slow in its course, unaccompanied with violent febrile irritation, as well as frequently occurring hæmoptœ*, especially if the hectic-fever takes the *intermittent type*; hence, in the so-called galloping consumption, and especially in that form occurring in young people, designated as florid consumption, no relief is to be expected from these remedies, because they do but *increase the irritation and rather promote than prevent Hæmoptœ*. This may be the reason why the author saw no result from these remedies in the pulmonary tuberculosis which so often attacks the *young girls who make cigars*, and which always sets in with repeated Hæmoptœ, rapidly terminating in consumption. Here it is to be considered, however, that, remaining in an atmosphere constantly impregnated with the vapor of tobacco, so deteriorates the life of the blood, that the vital process is attacked in its very centre, and brought near to dissolution, even before the outbreak of the local trouble in the lungs, so that no remedy is capable any longer of removing it. The author remarks, still further, that, if the prostrated powers of digestion do not promptly rally under the use of the Quinine and the Sulphate of Iron, inasmuch as thus the first momentum for the restoration of the enfeebled formation of blood is lacking, which is the chief factor of tuberculosis, *certainly no beneficial effect is to be looked for* upon the existing disease of the lungs: more than this, we should abstain from

their use, and not resort to them again, unless one should, perchance, succeed in improving digestion by some other means. In conclusion, the author mentions that the good effect of Quinine in tuberculosis had been latterly extolled in France as a new discovery; the above examples show that it was established long ago in Vienna. (Esterreichische Zeitschrift f. practische Heilkunde, 1858, Nr. 21.) — TUTSCHKE.

§. 269.

We have just learned that workers in coal-mines belong to a class which, above all, is protected from tubercular disease of the lungs, though members of their families, engaged in other occupations, die of this disease. Further, that the sub-phosphates of Soda and Lime are the specific remedies for this disease, *because* they are said to possess an immediate influence upon the tubercular diathesis, as "they directly increase the nerve-force, and are excellent blood-makers." Finally, Quinine, Acetate of lead, Digitalis and Cod-liver oil, have proved themselves useful for the same end.

Thus, various remedies for one and the same disease. The physiological school thus thinks, really and truly, that it has, in pulmonary tuberculosis, only one form of disease, though it uses means so utterly diverse for its cure. Certainly, and quite naturally, it has examined the tubercle a hundred times, and has always found it the same thing. Why should various causes lie concealed behind this external uniformity? Just for this very reason, that no physician of this school can send his patients into a coal-mine; that, moreover, for the assertion, that those sub-phosphates were to have a direct influence upon the tuberculous diathesis, etc., and for the use of Quinine, Sugar of lead, etc., no grounds can be offered, upon which the cures which took place could be explained, every disciple of that school will soon forget what he has read thereof, as not to be depended upon in practice. Nevertheless, these gentlemen do not hesitate to give publicity to such narrations, though they can be of no practical interest to their partisans.

To Homœopathy only, such statements are not entirely without a lesson, for it knows the natural grounds upon which these cures were possible, provided they were found to be really permanent: and more than that, it knows, even, from the effect which ensued from the remedies mentioned, which specific cases those cases must have been. It knows that the inhaled coal dust prevented the development of Phthisis, in the first and second stage, and because, most probably, these were cases with a disposition to that kind of pulmonary tuber-

culosis which, in scrofulous constitutions, appears together with a pale face, affections of the glands, frequent rheumatic ailments, and temperaments rather phlegmatic; especially if these patients, in earlier years, had taken mercurial preparations in sickness.

The cases which the sub-phosphates cured were, according to the law of similarity, surely, in persons of a slender bodily frame, with light hair, having night sweats, circumscribed redness of the cheeks, bloody expectoration, great irritability of the disposition, etc., individuals who had previously suffered with diseases of the bones, Pædarthro-cace, etc., or who descended from arthritic parents, etc. But those cured with Quinine were certainly just those who presented the symptoms of the last stage of Phthisis pulmonum, as this school usually expresses itself in general terms, without a single tubercle ever having been observed in the sputa. These cases resemble that last stage so exactly, that they have deceived the most practiced diagnosticians, of course, against their will. These are the cases of toppers and drunkards, among others; Tuberculosis is never here present, but always a profuse Bronchorrhœa which, often, is mixed with much blood, or streaks of blood and copious quantities of pus. Such cases are, moreover, characterized by the most complete lassitude of all the limbs, and great loss of strength, but are just as surely cured by Quinine, perfectly and in the shortest time, as are the previous cases, with the remedies specific to them, Carbo vegetabilis, and the Phosphates; but, also, most certainly, without the superfluous addition of Sugar of lead, Digitalis, Senega and Iron, or rather in spite of them. At most, the Sugar of lead might have helped in checking the diarrhœa, which Quinine, however, would have done alone. But since it also suddenly checks the mucous secretion of the bronchi, it might have been followed by the most injurious influences, as well as the Opium, while the Squills only promoted the mucous secretion. But this these gentlemen cannot know, and hence, also, cannot quit the compounding of drugs. *One can surely calculate upon this, that he who uses the most remedies, is the most uncertain and unpracticed physician.*

All these cures could only occur through an *involuntary Homœopathy*, a fact that every one must admit *who is familiar with the provings of the remedies used, and their therapeutical significance*: such a one also knows how to find the reasons, why others treated with the same remedies were not cured, in this fact, that their diseases were not treated according to the Homœopathic differential diagnosis, but only according to the empirical differential diagnosis. Cases of involuntary practice of Homœopathy by its opponents, are abundantly laid down in

Homœopathic journals. However, I cannot deny myself and Homœopathy the pleasure of adding a new one thereto.

It has been lately discovered that many paralyses by lead poisonings, the anamnesis of which previously appeared obscure and inexplicable, were produced by snuff. These lead poisonings, which began with symptoms of paralysis, led the physiological school to think that they might also be cured by the inductive electrical apparatus, *because* this is frequently the case with rheumatic paralysis. Now this is like all the indications of the physiological school, an incomplete induction *in optima forma*, a supposition; and it went to work without even in the least considering the question as to the justification of this measure, §. 79, or previously investigating what natural law could be adduced for it. *Accident*, however, would have it that it succeeded.

But what now has been accomplished? In every case, a cure according to strict Homœopathic principles; for even Hahnemann proved electricity and found it to produce similar paralyses, similar atrophy, similar trembling, etc., etc., as are wont to occur in rheumatic paralyses and in those of lead poisoning. Indeed, he discovered even that electricity is an *antidote to lead poisonings*, as are also Alumina, Platina, Opium, Belladonna, Stramonium, etc. Had the physicians opposed to him known this, they would have found, in their patients, the deductive confirmation of the Homœopathic law of similarity, and all their further use of inductive electricity, or, of the galvanic current in lead poisoning, would have taken place on the ground of a rational induction, while with their *imperfect* induction, ruled by probability and accident, they are thus *content* with a mere supposition. What shall we say now, if those very same men who can be accused every day of an *involuntary Homœopathy*, call themselves opponents of Homœopathy? That happens from ignorance, it is true. But if I should open the eyes of such a captured opponent of Homœopathy, to his manner of treatment, he would, in view of the results obtained by him, certainly *not* cry out, Lord, forgive me, I knew not what I did! and although an opponent, not at all quit his empiricism. But these gentlemen take it very ill of Homœopathy that it also does not practice according to empiric, or *incomplete*, but according to rational inductions. This example shows also, that ignorance only begets and nourishes parties, while knowledge would, by necessity, unite them. Which is better, to treat patients according to natural law, and to be able to foretell the result, or to render ourselves and our patients a prey to accident? The former is the demonstrated stand-point of Homœopathy, the latter of the prevailing physiological medicine.

Thus the physiological school, from various reasons adduced, would have to make mighty strides forwards, if it were minded to overtake the Homœopathic therapeutics, if it, as it fervently desires, really knew how to strive for a *rational* Therapeia; I do not now speak of a Therapy according to natural law, nor of the physiological Therapy, but of its diagnosis, upon which it plumes itself so incredibly, but in which, unhappily, in comparison with the Homœopathic differential diagnosis, it is left infinitely far behind.

Was it, perhaps, a latent sense of this weakness which goaded on and fed its hatred against Homœopathy? The proverb, *tantum quisque laudat, quantum se posse sperat imitari* would lead one to think so.

If the physiological school would possess rationality in its therapeutics, diagnosis and indication, it must have a fundamental principle, because *rationalism* is essentially characterized by the establishment of principles to which everything else must be subordinate. This, however, it lacks. Instead of this, it clings to the *sensible observation* of isolated phenomena by which every thing is to become clear, and that is it which everywhere is called *empiricism*. It should be glad, from its low stand-point, that it can establish *no* principle, and it should not seek to depart from empiricism, according to subjective opinions, until it has acquired a guiding principle, and, with it, learned to subordinate its procedure to natural laws, which can present the only possible theory, the only principles of a natural science.

None of its cures should occur with a *wonderful* rapidity, as it confessedly has happened with the phosphates of Soda and Lime, and quite as little as the above-mentioned cure, accomplished by Benzoic acid; it should be able to *predict* every cure, as is the case with Homœopathy, whose cures, in such a point of view, partake far more of the wonderful. But in a science, in Homœopathy, which, as has been demonstrated in these previous pages, is founded upon natural laws, there is nothing absolutely inexplicable, nothing wonderful, no mystery. Here everything is an object of knowledge, and not of faith that believes in miracles, for the course of events and the connection of diseases and cures come under necessary laws as they are set forth in this work. Hence Homœopathy is demonstrative, like Mathematics.

If, to any one, one proof does not answer for all, let him refer to the literature of the physiological school anywhere, and he will not have to look long, in order to convince himself what an incredible

amount of wonders will meet him. Therein, in fact, it passes judgment upon itself as upon a doctrine which dispenses with the requirements of science. Such isolated observations as appear in these quotations about pulmonary tuberculosis, furnish no definite understanding of the subject. For this definiteness, continuance and synthetic comparison of the perceptions, at least, are required, *i. e.*, *observation*, by which, alone, an understanding may be formed, which can lay claim to be called *experience*. Mathematics proceeds from generally recognized axioms as its basis, to which all the rest can be referred. Homœopathy can, as I have shown, proceed from the generally recognized laws of Nature, and in order to prove that, it can proceed as demonstratively as Mathematics, the counter-conclusions will serve us, which are possible to it alone; the counter-conclusions, to-wit, from the fact that the cure has actually taken place by means of a substance which it has proved upon the healthy, to the conclusion that the case was necessarily one of a well-defined kind. Those cases, for example, which could not be cured by the phosphate of Lime, were cases which did not stand in a specific relation to this substance, according to the law of similarity, and it was owing only to ignorance of the *Homœopathic differential* diagnosis, and to the faultiness of the empirical-differential, that such cases were, nevertheless, mistreated with these substances. Homœopathy possesses, to speak in mathematical language, in the books of rules regarding its drug-provings, not only tables of results, but also tables of reciprocal effects, and by virtue of the significance of these books of rules, Homœopathy can not only establish indications according to natural laws, it can also, as an inductive and demonstrative science, as has just been shown, draw conclusions from the results of a remedy to the bodily constitution, which necessarily must have been present in that case.

How long will it yet be before the physiological school will have attained the position of a demonstrative science?

§. 271.

At present its method of criticism is a clog which it has itself forged to prevent this progress.

It is necessary to adduce, even as regards this point, an example, such, however, as one may read any day.

Regarding the Hand-book of Special Pathology and Therapeutics, by Dr. Kissel, a certain Geigel thus expresses himself in the *Medizinisch-chirurgischen Monatsheften*, April 1st, 1864:

"The author would show that a follower of Rademacher could know right well all the trumpery of Pathological Anatomy, Microscopy, Physiological Chemistry, or rather, that for the sake of the decoration, he does not hesitate, out of Monographs and Hand-books, to fabricate a possible compilation. In fact, Herr Kissel has performed this work in his book with so much skill that one is glad, so to say, in the midst of his wonderment over such comprehensive and humiliating knowledge, to find some deficiency, no matter where, for example, in the entire silence regarding laryngoscopy, to recognize the human imperfection of the man."

"Yet all knowledge is vain, and faith only brings a blessing, faith in the *Unctio emollientis*, and the curative efficacy of blood-and-organ-remedies, and, if it is true that faith can remove mountains, then we need not wonder that the hyperemia of the liver, curable by the water of Nauvumica, presents itself, according to circumstances, under the following forms of disease: As acute gastro-intestinal Catarrh, as acute bronchial Catarrh, acute Hepatitis, Pneumonia, Erysipelas, Influenza, chronic gastro-intestinal and bronchial Catarrh, as Intermittent fever, Icterus, Scarlatina, Chlorosis, Atrophica vulgaris, Asthma, Rheumatism, Testiculae, Ascites, Fluxus albus, Protrusio of the rectum and Hydrocele of new born children."

Thus, whoever requires of Materia Medica and Therapeutics more than a plural choice of agents, under whose influence *Myodigital* functions may be restrained or excited, disturbances may be relieved or may run their course without injury to the organism; in short, whoever desires a true *curative means* in the peculiar, dynamic sense of this word, which shall drive out the devil or the disease without ceremony and re-establish health again, he will, if only in some degree blessed with the necessary organ of faith, read this work upon special Pathology and Therapeutics with the greatest benefit."

From these phrases, it simply appears that this criticaster has not tried, in practice, the advantages of the therapeutic directions laid down by Rademacher. Untried powers, however, are, for the practitioner, all the same as absent powers, and when one, nevertheless, presumes so far as to arrogate to himself an opinion upon the experiences of others, then that can only arise from the subjective desire *in cybe magistri jurare*.

In fact, there are, in the so-called physiological medicine, a number of catch-words, and every pupil deems it his duty to uphold the opinions of his master. These gentlemen are so little physiological, and so little logical within, that they transmute ideas and substances, and draw them according to their subjective want.

But, to the method of criticism, belongs especially *proof* or *demonstration*, and both consist in this, that the propositions to be proven can be or cannot be brought into necessary connection with previous propositions already proven or otherwise known. But where could the Therapy of physiological medicine present such a demonstrated principle? Because it must painfully feel the lack of such a possession, it necessarily loses itself, by way of compensation, in babbling, which, from its vulgarity, one would rather look for in a laundry than in a scientific Journal.

A *revue* has no other object than to call the attention of the reader to the good and excellent matter in a work, and a *criticism* no other than to prevent the reign of dogmatism and skepticism. Far from being conscious of this duty, the physiological school proper, by its reviews and criticisms, that it is not yet equal to them. Analogies and metaphors are not only not avoided, but they are considered even as the main points of the strife. But this is not the only thing which stains the reviews and criticisms of the medical journals of physiological medicine: they all bear, upon their very front, the marks of the fermenting process of skepticism, and of inbred dogma, and thus an enlarging of our knowledge, to accomplish which should be their high vocation, is not possible; on the contrary, the deception which is propagated in this manner, is a hindrance to progress, since it persuades its readers to limit themselves to the particular hypotheses which just then creates the greatest future.

Therefore the character of the reviews and criticisms of the physiological school is marked. *To err is human, but to err intentionally is inhuman.* This motto one could, without hesitation, brand upon the neck of the physiological school. The public desires physicians who belong to no system exclusively, hence, would be able to offer partial aid only, for nature does not care for the systems and theories studied out by men. The physician of the public must be Allopath, Hydropath, Ralemacherian and Homœopath, *i. e.*, he must know, and have practically tried, what each one of these systems is, in fact, capable of accomplishing.

But whoever maintains the necessity of using remedies must have satisfied the Homœopathic maxim, and, first, must, without fail, have *probed* many remedies *on himself*, and that in the high, highest and lowest attenuations, as well as in the mother tinctures; otherwise he is *incapable* of judging upon the action of one remedy or another, in its various quantities; he must have experienced and studied these actions upon himself; and, above all, to the non-Homœopath, it can never be permitted to express a subjective opinion on such

matters; for even the authority, at present most extolled, that of the well known politician and phraseologist, Virchow, teaches him, "*what is not empiric, is not logical.*" This proposition, although not correct, should, nevertheless, induce his pupils to study Homœopathy, at least according to the rules of empiricism. If they fail to comply with this simple postulate, then it does not become them to express any opinion upon the Homœopathic science and art, and they are, moreover, entirely unable to satisfy the just demands of the public.

§. 272.

The effect of the homœopathic attenuations upon the organism and its parts proceeds, *pari passu*, with the mechanical processes in §. 221, as soon as they are communicated to the blood, and this explains the fact, long since established in Homœopathy that, in many cases the higher attenuations show that they have a more rapid, certain, and intense effect than the lower, because, in them the number of molecules and their superficies are increased to the maximum.

If we take, for example, the case of a chronic disease, a form of scrofulosis, which perfectly agrees with the symptoms which we know to be the result of Sulphur taken internally, and if we give Sulphur in the first, second or third trituration, or even in one of the first suspensions, then we observe, not infrequently, in spite of the indication having been correctly established, that the cure, which has been commenced by it, suddenly *stands still* at the point which it has reached, and makes no further progress. If we now give Sulphur in the 10th or 30th suspension, then we see the cure progress anew and become complete. For with this increase of the molecules, the effect of the same substances is evidently increased in a corresponding degree.

The sudden *stand-still* of the cure, notwithstanding the use of the rightly indicated remedy, this stagnation of effect, frequently brings the beginner into great embarrassment, since even the alternation of a lower attenuation with a higher, or *vice versa*, often disappoints all our expectations.

But if we remember what has already been amply demonstrated in §. 243, regarding alternate remedies, then the direction of Hahnemann to choose a second remedy, a third, etc., when the first does not fully suffice to remove the disease, becomes intelligible.

There is scarcely any disease which we are capable of curing with one remedy, and, if we carefully read the clinical cases of great Homœopaths, in which the result was favorable, we find that the remedies successively used were similars indeed as regards the symp-

toms, but that their effects, according to the process which they induced within the organism, were opposite. This is at the same time the material basis of the use of the *homœopathic* antidotes, of which I am soon to speak more particularly.

Hence, in such a stand still of the cure, we must at once let an antidote follow the previous remedy, and we shall then witness the most favorable continuation of the curative process.

Here, also, those processes belong which became known to the physiological school by vaccination, as a preventive against variola and which have quite recently been introduced by the most abominable of all its practices upon the human body, viz.: syphilization, *i. e.*, the inoculation of the syphilitic poison against syphilis. I myself have observed something belonging to this category in workmen in a gun-cap factory where they daily, although imperceptibly, inhaled the exhalations of carbo-nitrogen gas, yet, in the midst of cholera, remained free from this disease; the women, however, became sterile in consequence thereof.

This brings us to infer that such events could only occur in consequence of *immunity*, which was produced by inoculation or a similar action, and that the law of immunity is that of the repulsion of similars; accordingly the parts remaining healthy must have been saturated with such substances in minimal quantities, and a condition of the body must have been produced upon which the same poison could no longer exert an injurious effect.

We see the same law fulfilled in the serpent-catchers, who take the poison of the snakes, which they wish to catch, until they are thereby protected from the evil effects of the bite of this species of snakes, but this species only, so that they can allow themselves to be bitten without prejudice to their health.

But, an opponent of homœopathic attenuations may ask, to whom the effect from the minimum of the vaccine virus is suggested, is vaccine virus imponderable? I know how to reply to him in this matter, and as the answer is not written down in Homœopathy, it will have all the more validity for him.

Valentin says in his Physiology, "Contagions show that changes of the mass of the blood, quantitatively small, produce very considerable results. A drop of cow-pox lymph, which we introduce into the puncture, forms an exceedingly minute *quantity* in comparison with the entire mass of the blood. Since it carries with it a considerable quantity of water, the effective particles appear *still smaller* than they appeared at first view. The minimum of this, however, works for several days together till the pox-pustule appears. The state of the

blood hereby produced protects one against small-pox for many years. Something similar happens in other contagions and infections which are produced by the entrance or injection of decomposing matter into the blood.

One can imagine that a quantitatively small change may produce a small number of new combinations which may themselves again act as decomposers. Since these influences extend themselves from one molecule to its neighboring parts, so the sphere of activity will grow in more than simple ratio of time. The rapidity of the extension of the change determines the rapidity with which the sum of the *infinitely small differential effects* integrate themselves to a final result, or the influence of a *minimal cause* begets sensible results."

Into whatever regions of strategy our opponents venture, they are always easily overcome, and as yet Homœopathy has never failed to give them a humiliating reply. But the maintaining that one is right, at any cost, characterizes the narrow-mindedness and incapability of our opponents as already allied to their obstinacy, vanity and unfairness.

Here, also, comes to view again the difference between Homœopathy and the physiological school, that the first, to *produce immunities*, never ventures upon such decidedly injurious proceedings, and never needs them, as do the latter, for the purpose of their double-edged vaccination, and their abominable syphilization with the most dangerous organic poisons, in which latter case, the physiological school does not really know whether it inoculates the syphilitic or the gonorrhœal poison, and, in short, does not know what it is doing.

Thus there is a method of Homœopathy, not yet mentioned, of producing cures, to wit., that according to the law of the repulsion of similars for the *inducing of immunities*.

§. 273.

On the therapeutics of Inflammation, Zeitschrift für wissenschaftliche Therapie, 1857.

After general criticising, and comparative remarks upon the cure of inflammation by the physiological school and the school of Rademacher, the author proceeds:

"In connection with these remarks, I take the liberty of presenting a brief account of a so-called scrofulous inflammation of the conjunctiva of the eye, with ulceration on the edge of the cornea, cured with Iron.

"I know very well, and have already said as much in this Journal, with regard to "the narration of clinical cases," that whoever wishes to advance Therapeutics by publishing clinical cases and their cures, ought, above all, to ask himself the question—*whether, by the occurrence of a cure, after the exhibition of a remedy, the effect of the latter is really demonstrated?* If this is not the case, then the physician may rejoice, of course, that his patient has recovered; but such doubtful cases of cure are certainly not deserving of publication and it is much to be desired that the editors of Medical Journals should make selections from the reports of cured cases, and the accompanying recommendations of this or that remedy, with more critical acumen than has been the case thus far. I consider my case, however, as proper for publication, not as a sample of the treatment and cure of a patient—for, unhappily, it is not that at all, since I cured the patient only after various errors, and after too great a lapse of time—but, because it is clear from the case that the patient was finally cured by Iron—*really cured—not post hoc, but propter hoc.* That this short report concerns no rare, so-called, interesting case, but, on the contrary, an affair of every-day occurrence, *in its formal diagnosis not at all to be mistaken*, seems to me no reason for suppressing it, but, on the contrary, induces me to publish it, since a knowledge of the cure of every-day diseases is more useful to practicing physicians, from very simple reasons, than those of rare and unusual cases. If my narration seems somewhat diffuse in view of the insignificance of the case, it is given in such detail only with the desire to give the clearest possible insight into the connection between the disease and the remedy.

John G., son of the late President and former minister G. at B., ten years old, of a size corresponding with his years, long, slender limbs, soft blonde hair, blue eyes, suffered for years in a slight degree under a pathological condition usually called scrofulosis, and which, in this case, manifested itself in hyperæmiæ and stases of the mesenteric glands, as well as the tonsils and Meibomian glands. The consequences of this affection were disturbances in the function of the glands, *i. e.*, morbid secretion and defective formation of chyle; swelling and hardness of the abdomen, cold in the head, indistinct speech, blepharadenitis in the first stage, an appetite now good and now poor, with a slight white coating on the tongue, but no other very striking disturbance of the other functions of the body. Against these symptoms, I used, for several months, the common empirical means, regulating the diet and manner of life, cod-liver oil, then bitter water, after that Iodide of potash, local injections of a weak solution of chloride

of sodium into the nose. Gargles and inunction of the eye-lids with Jungken's red precipitate eye-salve were used without witnessing any evident result, as unhappily is so often the case under the use of the so-called anti-scrofulosa. Only after the use of the bitter water the abdomen decreased in size, and the eye-salve, without doubt, relieved the blepharadenitis. There was no opportunity of using the saline springs, and the little danger attending the case did not make them essential. One day, *in consequence of some unknown cause*, hyperæmia of the conjunctiva of the left eye manifested itself with its accompanying redness, heat, stitching pains, morbid secretion, swelling of the upper lid and a moderate photophobia.

There was no fever, and all the functions of the body apparently remained unaltered. The sudden appearance of this morbid state, which, according to the customary nomenclature, had to be designated as scrofulous conjunctivitis, and the common association of ideas, which at once connects with the name of "inflammation," the corresponding one of "antiphlogosis," and in the channel of which, the mind, well-trained in school wisdom, moves along with a good deal of comfort, induced me to use *Natr. nitr.* The patient was, at the same time, kept in a dark chamber, the eye protected by a large screen, and, locally, cold compresses wet with weak Fennel tea, were applied. But after using 3 vj of *Natr. nitr.*, four days, everything remained exactly at the old point. Partly on account of the failure of the Salt-petre, and partly in view of the comparatively good health of the patient, who ate and drank with a good appetite, and only complained, when asked about it, of stitches in the inflamed eye, and especially when looking at the light, I now determined to attack, with Iodide of potash, the scrofulous glandular affections which had existed for a long time, as the seat of the disease. As this produced no change in three days, I resolved, in addition to this, to use leeches symptomatically against the inflammation of the eye, which I looked upon as dependent upon the glandular affections; thus, first three, and then five leeches, were applied to the temples; a blister plaster, also, behind the ear, and an eye-wash, first of Acetate of zinc, and afterwards of a weak solution of *Merc. corrosivus*.

Under this treatment, however, which, as I think, was quite proper according to the school, the condition of the eye was evidently aggravated; the *bleeding* seemed to have an *especially injurious* effect; redness and heat increased, and, upon the shining cornea, an abscess formed as large as the head of a pin. The general state of health, also, got worse; the patient lost his appetite, was much inclined to sleep, and had a *slow, weak pulse*. With this treatment, I lost five or

six days, to the injury of the patient. The condition of the eye had now, indeed, become serious. I cursed inflammation, and antiphlogosis, scrofula and the Iodide of potash, and leeches most of all, and, without any longer fearing the phantoms of *Materia Medica*, I resorted to the use of Rademacher's Tinct. ferri acet., in a solution of gum. The inflammation was surely not of traumatic origin. But neither could it be idiopathic, since the local treatment, with appropriate means, had been in vain, and the patient had, for a long time, showed signs of the affection of the glands, known as scrofulosis. The inflammation surely did not depend directly upon the latter, otherwise, the Iodide of potash would have probably produced some relief. There was not a single symptom which favored the supposition of another primary organic affection. The inflammation of the eye had, therefore, to be considered as being caused by a general affection of the blood. Whether this latter stood in any causal connection with the scrofulosis, which might very readily be the case, considering the near relation of the glandular system to the formation of the blood, or whether it had associated only accidentally with scrofulosis, in consequence of external influences, and thus had called forth the inflammation of the eye, could not be determined. By *Saltpetre*, which, as I now saw, I had given without any tenable indication, having only been led astray by traditions which now and then gained power over me, this supposed disease *of the blood was clearly not to be removed. Hence it seemed quite obvious that Iron should now be used*, as its employment was not only indicated by the failure of the local means, of the glandular remedy, Iodide of potash, and of the blood remedy, *Saltpetre*, but also distinctly by the weakness of the patient, the last-mentioned state of the pulse, and the experience that hyperæmia of the conjunctiva and blepharadenitis, frequently occur as symptoms of affections of the blood, curable by Iron; finally, by the prevailing genius epidemicus, which frequently required the use of the preparations of Iron. The state of the urine, which had a feeble, sour reaction, showed no redness or turbidity, and the *mucous membrane of the throat*, which was *swollen*, not *anæmically*, but *hyperæmically and reddened*, presented no supporting points. The result, however, completely justified the choice of the Iron. Literally, with every spoonful, the inflammation decreased, so that after it had been used for twenty-four hours, the conjunctiva presented its perfectly normal structure and color; only there were three or four minute vessels moderately injected, winding their way to the abscess in the cornea, which two days before had developed into an ulcer. The swelling and redness of the upper lids had diminished in the same

degree, the cornea had lost its morbid brilliancy, and the photophobia, pain and heat, had disappeared. I ordered the patient to take the Iron a few days longer, during which time, also, the small ulcer on the cornea healed up, and I could dismiss the patient to his friends in the country, as cured of the inflammation of the eye. If he should again come under my professional care, I shall *endeavor to cure his diseased glands with Iron.*

Would that our modern ophthalmologists might also learn something for their Therapeutics, from such and similar observations. Great as are the achievements of many of them in the domain of Pathology and of Ophthalmic surgery, it is yet very desirable that they should introduce some change in their stereotyped antiphlogistic Therapeutics, with its inevitable leeches, blister-plasters, neutral salts, purgatives, and Calomel powders, and its local treatment, with corrosives and astringents, blue spectacles, eye-douches, and inductive currents. For, alas! their therapeutic results stand in too striking contrast to the frequent brilliant results of their operations, as every physician knows, who has seen eye-patients who have returned from the celebrated Ophthalmic surgeons of Berlin, Prague, and Vienna. It is not my aim to assume more for the above case than can be demonstrated thereby. However, it establishes, at all events:

1. That there are inflammations of the eyes, which, not only are not cured by antiphlogosis, but are even made worse by it.
2. That Iron is not contra-indicated by inflammations; on the contrary, that it will cure them rapidly under certain circumstances.
3. That the inflammations, which may be cured by Iron, probably have their cause in a diseased state of the blood.
4. That blepharadenitis is calculated to awaken the suspicion of such a disease of the blood as is curable by Iron.
5. That the want of any general febrile reaction, as well as a weak, slow pulse, with considerable local symptoms of inflammation, appears also to be a frequent symptom of such diseases.

CONTRIBUTIONS TO PHARMACO-DYNAMICS. ZEITSCHRIFT FÜR WISSENSCHAFTLICHE THERAPIE, 1857.

On the curative effect of Nux vomica. The tincture of Nux vomica the remedy.

1. FORM OF DISEASE—NEURALGIA FEMORALIS.—“L. Rumm, a nail-smith, thirty years old, had suffered for fourteen days with a violent neuralgia, which so exactly corresponded to the usual course of the femoral nerve that it might have helped many students of anatomy out of their embarrassment. His urine was dark yellow. Otherwise the man seemed to be sound. I prescribed for him, October 14, 1847, the remedy against *the then prevalent liver diseases*, the tincture of Nux vomica, 15 drops 4 times a day. The patient, however, took from 20 to 30, and, with such a favorable result that he found himself much relieved by the 16th, and when I went to see him on the 18th, he had gone to his work again perfectly cured.

This case of femoral neuralgia is the only one in which I have effected a cure with the aid of a liver remedy. Should the neuralgias which Romberg cured with large doses of Turpentine, be also ascribed to a liver disease? or, were they produced by a disease of the kidneys, or was the curative effect of the Turpentine an antagonistic effect, or, finally, was Kissel right when he considered the spinal marrow as the specific sphere of action of this remedy?

2. FORM OF DISEASE—HOOPING COUGH.—Alexander Gesell, fourteen months after his birth, on the 24th of January, 1849, was taken with a cough, the attacks of which were distinguished from the ordinary hooping cough, only by the absence of the long-drawn inspiration, which is peculiar to the latter. The use of the extract of Nicotine, which was continued from the 27th of this month to the 20th of February, which was wont *then* to cure spasmodic coughs, effected not only no diminution of the cough, but produced great debility, want of appetite and a sooty state of the tongue. The urine, which was now shown to me for the first time, was dark yellow, the feces were lighter colored than is usual at this age. The specific for most of the *liver diseases* at this period, the tincture of Nux vomica, produced a marked relief by the 4th, and, a few days after, a perfect cure.

From the cases of hooping cough observed by me, part of which were previously communicated by me, as experiences regarding the

curative effect of Golden rod, Cochineal, etc., I feel warranted in concluding:

1. *That hooping cough most frequently is a symptom of a disease of the kidneys.* Most of the hooping cough remedies act upon this organ.

2. That this cough, however, *may also be* an expression of a simple disease of other organs or one connected with a universal affection.

3. That the proportion of cures of various cases of the same epidemic of hooping cough is not always the same.

If the last assumption is correct, then *there are two miasms lying at the bottom of every epidemic of hooping cough*, one which produces the *fundamental disease*, the second which produces *the form of the disease*.

3. ERYSIPELAS OF THE FACE.—Marie Gutzow, forty-nine years old, a widow, came to me November 27, 1846. She had suffered for a long time with erysipelas vagum, which most frequently affected the left side, and also with rheumatic pains and one-sided headache, often ending with *vomiting*; for the last six weeks she has besides suffered with otorrhœa.

The acetate of Zinc gave no relief. On December 8 she came again with erysipelas on the right side of the head. The taste *was bitter*, the urine brown yellow. The tincture of Nux vomica, which I now used, removed all the symptoms of the disease by the 19th, and the use of medicine, continued a few days longer, prevented their return.

4. VOMITING AND ERYSIPELAS OF THE FEET.—On the 14th of December, 1848, Mrs. Gnörig desired my advice for her son, thirty-nine years old, who, for the last three weeks *had to vomit after every meal*, was very much debilitated thereby, and, besides, suffered with erysipelas of the feet. I ordered the tincture of Nux vomica. The next day even, the *vomiting did not return*, and by the 17th the man, though quite weak, was otherwise entirely well.

5. PAIN IN THE STOMACH.—Tincture of Nux vomica with the acetate of Potash. Widow Wind had had on the 15th of November, 1846, a bitter taste for two days, a thick, white coating on the tongue, like soap, *inclination to vomit, with pains in the head and limbs*, together with great lassitude. Her urine was dark yellow, the fæces said to be brown. An emetic aggravated the disease. After she had taken, on the 16th, 3 j of Magnesia, she had to vomit very often. The matter thus ejected had a neutral re-action. Bismuth, on the 18th, and a mixture of Iodine and Tragacanth on the 19th, relieved her quite as little. On the noon of this day the patient sent for me to

come to her quickly, as she had such violent pains that she thought she would die. She had to *retch and vomit almost constantly*. The tincture of *Nux vomica* with the acetate of Potash removed the pain and the vomiting at once, and hence was prescribed again the next day. *The apothecary sent, however, instead of this, the Iodine mixture.*

On the 21st the pain had returned again, and the patient earnestly entreated that the medicine before the last should be given to her, as she had been so promptly relieved by it. This was done, and in three days every symptom of disease was removed.

6. PROLAPSUS OF THE RECTUM.—Emilie Knabe, a year and a half old, who was relieved, early in 1847, of very frequent discharges of bright yellow feces especially during the night, by an emulsion of an infusion of *Ipecac*, had suffered, on the 26th of this month, for three days, with a frequent prolapsus of the rectum, with normal fecal discharge. At the same time she had a cough, with a loud mucous râle. Four drops of the tincture of *Nux*, taken till noon of the 27th, sufficed to prevent the return of the prolapsus, and the continuance of this drug, in the same dose, removed the cough also in a few days.

7. DIARRHŒA.—For Luise Kumm, thirty years old, I prescribed, August 8, 1848, five drops of the Tincture of *Nux vomica* four times a day, because she had had, for many days, frequent discharges of thin yellow feces, with *tenesmus*, and pains in the bowels increased with every movement; she had also a violent cough without much expectoration; the taste and the tongue were normal; the urine was acid and dark yellow, and the *liver diarrhœas were then under the curative power of this remedy*. Already by noon of the next day, the pains and the diarrhœa had ceased, and the use of the drops, continued for three days in doubled doses, sufficed to remove all the other symptoms of disease.

8. DIARRHŒA WITHOUT SENSATION OF THE PASSAGE OF FÆCES.—To Kiewewetter, a silk weaver, sixty years old, I prescribed, August 6th, 1848, Ammonium and Natron Carbonicum, because, for the last two days, he had frequently complained of chills and heat, headache, inclination to vomit, and offensive sour taste, and during the last twenty-four hours had had ten thin light-brown fecal discharges. On the 8th, I found that both the vomiting, which occurred especially when he *saw others eat*, and the diarrhœa, had increased. Although the intellect of the man was undisturbed, *he did not feel the passage of the feces*, so that he often soiled his bed. On this account I gave him the tincture of *Chelidonium* ʒj. in ʒvj. of Emulsion, but, since

the disease had increased still more on the next day, and the fæces had become *gray*, I had recourse to the remedy for the then *prevailing liver diseases*, the tincture of *Nux vomica*, which I gave in Gum-water. Decided improvement occurred by the 10th, followed in a few days by a perfect cure."

§. 275.

Since, according to §. 273, antiscrofulous and antiphlogistic remedies and bleedings afforded no relief, the inflammation was not traumatic, and as it was not diagnosticated as idiopathic, it was, hence, necessarily produced by a general disease of the blood, and since Saltpetre did not answer against this state of things, recourse was had to Iron, which was indicated by the lassitude of the patient, the slow, weak pulse, and the prevailing genius epidemicus.

"The result," we are told, "fully justified the choice of the Iron. Literally, with every spoonfull, the inflammation decreased." That is surely no induction *post hoc, ergo propter hoc*. It would be a new confirmation of Rademacher's natural law, supposing this to have been anticipated by experiment and observation, hence an event of deduction, according to form; but of an incomplete deduction, because the rule thereto contains, indeed, a possible principle, but an empirical conclusion without any foundation resting upon a law of nature; for the law abstracted from experience could not, as yet, be discovered by this school.

Hence the persecutions which it has to suffer from the physiological school; hence the reason for reducing the matter to the rules of probability, as is done under Nos. 3 and 5 at the close of the quotation, §. 273, while No. 5 is worthless.

If the writer had known the provings of Iron, which, it is true, have not yet been collected, but are scattered about here and there, then points of support would have been given him which would have saved him a long search, and made a homœopathic differential diagnosis easier.

But what shall we say to §. 274? Here, indeed, we find a contrast to the therapeutics of the physiological school, and an agreement with the homœopathic, in so far as this, that one remedy is mentioned for manifold forms of disease; but under what indications and to what questions did they give rise?! All of them, no matter how queerly sounding, are answered simply by the provings of *Nux vomica*, a substance whose specific lines of direction in the organism run towards the spinal marrow, the vagus and sympatheticus, whereby all the cures

of these diseases, *since they lie in these lines of direction*, find their explanation. Is it not of uncommon interest for the history of Therapeutics to learn how the most manifold and most varied perceptive reasons [*rationes cognoscendi*] lead to the most varied indications, and thus by their help, frequently to actual cures? What a grand testimony, not only for the creative power of the human intellect, but likewise for the greatness of Homœopathy, to whose laws every one of these cures may be referred back as to their ultimate reasons. *Is there not proof enough here for my experience so often asserted, that no conclusion, however unpleasantly or unexpectedly it may run counter to our usual mental associations, ought to serve us as a cause, unconditionally, in rejecting with it the fact also which has been judged upon.* Never is the conclusion the subject, and every conclusion possesses only the worth of an hypothesis, a supposition, so long as it is not referred back to laws; hence it follows, irrevocably therefrom, that we are not justified in rejecting any conclusion for its own sake, because we are wont, therewith, to reject also the fact which is judged; and all facts would be worthless to us, the history of therapeutic science would be written in vain, and we would be compelled to fall back upon the very initial state of things, as it has happened to the physiological school with its therapeutics, provided it were not our task to rectify mistaken conclusions according to the occasional stand-point of general science.

The false generalization of "*contrarium contrariis*," has no scientific, but only an empirical sense, and to the most pernicious of all assaults upon the organism thence arising, belongs blood-letting, which, whether it be local or general, is practiced by Rademacher's school even to an extent which may be called in the highest degree inhuman. It has been demonstrated a thousand times how destructive it may become to withdraw the soul of the corporeal life, the blood, in such quantities, as it is above all taught and practiced in the physiological school. Even if the patients survive the disease, instead of recovering, they languish away into a miserable death from debility. I acknowledge that for eighteen years, in a very extensive practice, I have never had occasion to bleed, not even in Pneumonia. Nor will any one, who wishes to proceed according to natural laws, ever again employ blood-letting as an *antiphlogistic*, for there is no anti for any disease, but only for diseased processes and morbid matter. As a palliative, as a means of momentary relief now and then, probably a few ounces of blood may be drawn. [V. hom. Therapie, v. Kafka, Sondershausen, 1865, p. 77.]

From what has been said, only a Homœopathist, no doubt, is prepared to decide upon the indication for bleeding; *α*, because he pos-

sesses a number of remedies which make bleeding superfluous; *b*, because he can remove the injuries which arise from bleeding or hæmorrhages; *c*, because the physiological school does not understand how to render either the one or the other of these helps. Let any one, on this point, compare the above quoted excellent work of Kafka with the Therapeutics of the physiological school.

§. 276.

The fifth case, entitled "Pain in the stomach," gives occasion to point to a therapeutic law not yet touched upon, which sets forth the necessary succession of drugs, and a new ground for the failure of cures attempted in consequence of ignorance of that law.

There are certain counter-movements of remedies in Homœopathy known under the name of *Concordances*, according to which, those substances are used as remedies, which may be given in succession without their movements counteracting each other, according, however, as in a Homœopathic sense, a febrile affection, or disease of some organ, or of the osseous or glandular system, or of some intellectual function is to be cured. According to this law, in case 5, described as pain in the stomach, a therapeutic error was committed, because Iodine should not be given after Magnesia.

Dr. von Bönninghausen has given to this law the greatest attention, and in his Therapeutic Pocket-Book are to be found the groups which belong under this rubric.

But some practical examples again will give, in the shortest manner, the further necessary explanation.

In the second year of my Homœopathic studies, a woman thirty years of age, was attacked with a tertian intermittent. After taking Quinine, four one grain doses every day, the fever failed to appear on the next typical day; however, as it did not reappear at the time when it was to make its second attack, I gave the Quinine three days longer, and the intermittent seemed to be cured. After two weeks had passed, and the woman during this time had performed her manual labor without interruption, she now began to complain, for the first time, that, without being pregnant, her menses had ceased for four months, and, to this circumstance, she ascribed her increasing debility.

Now I had just at that time cured a girl twenty years old, with whom, for four years, this function had ceased, no cause being known in this case to which this cessation could have been ascribed. Since the cessation of her menses, however, she was imbecile, and had been

treated by many physicians, to no purpose. The menstruation returned again in two months, after I had given this girl, four times every day, Kreosote $\frac{3}{10}$, with regular intermissions of three days, the provings of Kreosote corresponding perfectly with the altered intellectual functions of this girl, together with the suppression of the menses and the concomitant circumstances.

Still very much fettered by conclusions from probability taught me by the school, I did not hesitate a moment, with this great success before my eyes, to give Kreosote to this woman also, though intellectually, she was entirely sound. But a quarter of an hour after the first dose of five drops of Kreosote $\frac{3}{10}$, a violent chill set in very suddenly, which continued an hour, followed by heat and perspiration, the patient being thus compelled to pass the whole day in bed.

Very much discouraged on this account, she declared that a few minutes after she had taken these drops, she had felt in her back the well known cool aura, and hence these drops had to bear the blame of this vexatious relapse.

For a beginner, without any guide, such cases are really necessary, since they alone can frighten him out of the customary Allopathic indolence, and compel him earnestly to take counsel with Homœopathic science.

Under such circumstances what would a pupil of the physiological school, firmly adhering to its tenets have done?

Even the woman's urgent request for her previous powders would have been sufficient to make him think of giving Quinine again, and, from the law of concordance, according to which, in intermittents, Quinine may be given after Kreosote, *but not Kreosote after Quinine or China*, I know, surely enough, that the intermittent would again have disappeared to her great joy, although menstruation would have reappeared all the less. Hence, for the present, even, I gave her Quinine again. According to empirical differential diagnosis, however, this suppression of the menses must have been the result of disturbed innervation. It was not enough, however, to know that, and it would, at the most, have led to the use of irritating ethereal remedies. A Professor of Midwifery of our day, who enjoys the greatest reputation, declares even that a local irritation of the genitalia is of importance (!) in such cases, and for proof refers to the fact that such patients are not seldom cured by marrying. Mineral springs containing Iron, Iodine, and Bromine, he says, are also beneficial as well as electricity.

Yet he hardly would like to warrant, I think, a sure result from all these empiric means.

However, it was just now to be considered what should be done on account of the changed sexual function, after the repeated use of the Quinine.

China, according to the provings, produces an effect for two or three weeks, consequently Quinine no doubt does the same, notwithstanding the fact that chemistry with its balance finds it again in the urine after a few hours. It must hence either have produced changes of nutrition or have remained behind in the organism, for so long a time, in an imponderable state. Hence, in any case, no substance should have been given which might possibly have disturbed again the action of the Quinine. Kreosote has an effect only for one or two days, and, in fact, after what has been said, does not come under consideration.

As emmenagogues, we find, amongst the concordances of China chiefly *Nux vomica* and *Pulsatilla*. *Against Pulsatilla*, however, according to the law of similarity we have: the robust corporeal constitution, the dark eyes and hair, the congested color of the woman's face and her bilious temperament, while all these declared for *Nux*.

That is what is called homœopathic-differential diagnosis, and indications predetermining the result. Thus, after nine days had past without any return of the fever, I ceased to give the Quinine, and the fever did not return again. But, eight days before the time, at which previously her period was expected, I had her take every day one dose of *Nux vomica* 3rd, and her menses returned at the usual time, as previously had been the case, and since then they have been regular. This law of concordances thus clearly stands under that of the attraction of dissimilars and repulsion of similars.

With this clinical case I intended, at the same time, to give the beginner a practical example of an important discovery to be regarded at the sick-bed, a discovery which Homœopathy has made by its drug provings, viz., that touching the *duration of effect* of various remedies.

I readily concede, that every one who is not acquainted with the laws of Homœopathy, watching as they do the very inmost of the organism, may believe that, in this clinical case, he has read a tale. But, in natural sciences, we have not to do with fairies or goblins, with belief or disbelief, but simply and solely with *knowledge*. The physiological school thinks it knows that Quinine is directly excreted, every part and parcel of it, at least within half an hour, when given in full doses. That may be quite true as regards weight. But what then has checked the intermittent fever? In any case, not the ponderable quantity, but the quality of an imponderable quantity, and Homœopathy knows that Quinine operates for two or three weeks,

i. e., that the movements introduced by it are often distinctly observable for so long a time by the respective symptoms: furthermore, that *Nux vomica* sustains these movements, and that *Kreosote* retards or changes them. Thus I would not know what objections could be adduced against this practice according to the previous paragraphs upon the laws of *Phoronomy* and molecular forces. The unbelieving, however, or those of another party, stubbornly clinging to their convictions, or skeptics, I refer to §§. 3, 7 and 32, which treat of these peculiarities. The law of concordances would contain, for the chemist, the most interesting leading principles for his investigations, if he could duly condescend to present to *Therapeutics* such labors as might be practically useful.

Connected therewith is the effect of *Antidotes*. According to the idea of disease based upon the laws of nature, which I established more than six years ago, as above presented—§. 35—and which has been copied from me by *Allopathic* writers even into one of the most recent pathological anatomies, and which, hence, is as well known by our opponents even, as is the manifold relation made known by me, between the quantity of curative substances and that of morbid matter, etc.; according to this idea, I say, the effects of remedies given must naturally be changed by that of others succeeding them, if it be not entirely annulled: that is to say, as soon as both have announced similar effects in their provings, and, in the interior of the organism, have induced opposite processes; for *this* relation from the succession of effects of substances of the outer world upon the organism, can be no other than the relation of the same succession of effects from morbid matters and remedies.

With this the idea of the *Homœopathic antidotes* is established, and hence every physician must have gained, from the study of the *Homœopathic Materia Medica*, a thorough knowledge, so as not to commit any error if he be obliged to change his prescription, and to introduce another remedy after one previously given. A practical example of this is contained in §. 110, and, if the idea of a contra-indication is to have an objective value, then it can only consist in the idea of antidotes in a *homœopathic* sense.

§. 277.

According to §. 264, an apothecary had sent the remedy previously prescribed instead of the one ordered last. We know, from daily reports, what fatal consequences from such mistakes and negligence

are wont to occur in families. With Homœopathic quantities such occurrences are quite impossible.

The Homœopathic preparation of drugs, which excludes such possibilities, exerts upon the views of an opponent a very peculiar impression; an astonishment, resembling that of a man surprised at one time by the sagacity, and at another by the stupidity of his poodle. Wherever it seems to fit, according to §. 164, they say that the Homœopathic drugs are *poisons*; and, at another time, where they aim at demonstrating the *inefficiency* of Homœopathic attenuations, pledge themselves to consume the entire contents of a Homœopathic medicine box without fear of suffering any harm therefrom. The latter, according to previous paragraphs, is possible even, provided that they have no *diseased organ*, for the Homœopathic doses of drugs are only calculated for diseased organs, and hence pass by the healthy organs without leaving any trace whatever. §. 101. But our opponents do not consider that they thus again speak in favor of that, which they are far from wishing to demonstrate, since, in that case, their experiment would declare *for and not* against Homœopathy. Thus, if Homœopathic remedies are given, without having been necessary or indicated, they surely would afford no help, but neither do they do any harm.

But that Homœopathy can do great injury to the apothecaries, provided they do not understand anything else besides their customary labors, is true. Hence they are as tradesmen, from pecuniary grounds, and, be it well understood, not from scientific grounds, the natural and, hence also, the greatest enemies of Homœopathy. But pecuniary loss accrues also to physicians, from Homœopathy.

As regards the first, it is to be considered that every apothecary possesses more knowledge than that which concerns the contents of his Pharmacopœia, and I know one of these gentlemen whose trade is but little profitable, because, in his vicinity, the physicians of physiological medicine prefer to prescribe nothing, rather than to injure intentionally, while the Homœopathists naturally procure nothing from him or, in any case, less than the former. This gentleman, however, gains a handsome sum by preparing, with unusual care, ethereal oils.

Regarding the second, I can refer to a case from a great number in my own practice, which also may serve as a specimen for all other cases:

A boy seven years old, has been sick since the first years of his life, melancholy and weak, since, through every summer he has been troubled with diarrhœa, which also disturbed his night's rest. For the last two years, however, this diarrhœa has been constant; the

most famous physicians of two of the largest capitals of Germany having failed to afford him any relief, although sea baths and other baths, Cod-liver oil, and a multitude of other remedies, were brought into requisition. Having fallen into my hands, the passages showed a want of bile, and since all the other symptoms agreed in indicating *Nux vomica*, I allowed him to take it, in the 3rd attenuation, three drops three times a day, in a spoonful of water. The second night after this, the boy slept the whole night through, the first time for many years. Since it is a Homœopathic rule to diminish the dose when an improvement sets in, I therefore had him take it now only twice a day. After eight days, eight days, I say, this chronic diarrhœa was entirely cured, so that now the boy grows finely. In this case I naturally received far fewer single dollars, as fees, than the other physicians had received hundreds. The gentlemen apothecaries may, hence, comfort themselves with the physicians. Indeed it must be acknowledged, that the practice of Homœopathy is not at all profitable for either. But where the question is, how to advance the welfare of humanity, there personal considerations must give way at all times. In vain did the wig makers complain of the vulgar habit of one's wearing his own hair; in vain the buckle makers of the slovenliness of wearing boots and pantaloons; in vain the landlords, hackmen and porters, of the extension of railroads; and the soap boilers and candle makers, of the erection of gas works; their complaints have never amounted to anything, and those have ever fared best who betook themselves betimes, to the search of new occupations, for they escaped, at the same time, being made a laughing stock.

While we are speaking of ignoramuses, I must mention what a member of the Chamber of Deputies said, to wit, that every one who could hire a servant, could fit him in a short time to be a Homœopathic doctor and apothecary.

Even with this stratagem, only a favorable testimony for Homœopathy is made out. It is true that well informed laymen can very well, and in a very short time, be so far instructed, that, under circumstances, they can afford the first help to a patient, and *just because* Homœopathy is based upon natural laws; and thousands of landlords living in retired places, have helped to save many a precious life till the physician came from a great distance to direct the further treatment. Just here lie new guarantees for the high social worth of this method of cure, since it can supply help beyond price, and can, so far as it is possible, popularize part of its knowledge, which directly protects the highest good of man; since, further, it thus demonstrates that it does not need to guard with anxiety the monopoly of its art,

and that it waive this without in the least sacrificing its dignity as an art and science.

The precious seclusion in which the majority sees itself compelled to be shut up, would long ago have been given up, had it only known how this could be accomplished without injury to itself. This very possibility of becoming popularized, in part at least, and the fact that it does not strive against this possibility, but rather favors it, declare on the one hand that Homœopathic therapeutics possesses infinite practical value, and, on the other, that it is conscious of its greatness and *of its scientific superiority*. What light is for the material world, that, perception is, for the direction of our actions. The physician, however, does not treat his patients; he only gives them advice, and when they do not govern themselves accordingly, this arises from lack of confidence. There can be, however, no confidence in Therapeutics, without an insight into its nature and the motives of the physician. On this account, the Homœopathic physician gives, to those who trust themselves to him, his open programme; he extends to them the Bible of the sources of his own knowledge. The Allopathic laity sometimes possess faith and confidence in their physicians, but only transiently, because faith has ever been opposed to knowledge, and denies an insight into the laws of Nature. The Homœopathic laity are in the enjoyment of an insight into the natural laws of therapeutics, which qualify them for a mutual understanding with their physicians. By these means every layman becomes his own medical assistant, for the most salutary deliverance of himself and his physician from heavy cares. On this rests the greatest proof against the *slander* upon Homœopathy that it practices charlatanery and plays with mysteries. Just the very assertion of a higher view, on which the Allopathic physician plumes himself in the presence of his patient, and which he anxiously endeavors to uphold, just this, is mysticism. Homœopathy, on the contrary, presents itself to the judgment of the people, who thereby know what their physicians intend to do with them. Thus Homœopathy is a *protest* against mysticism, medical mystery and charlatanism, and appeals to nothing but the eternal laws of Nature, while, on the other hand, the Allopathic physician has no resource but a calculation of probabilities, a calculation which is infinite, and so uncertain that it must surely be much more desirable for him that the laity should not know it.

§. 273.

One can, and, indeed must, fully assent to the doctrines of Rademacher, so far as I have followed them, that is, those parts thereof which are marked out as practical, and that, indeed, as will subsequently appear, upon grounds which harmonize with the corresponding Homœopathic experience.

But Rademacher and his adherents found themselves, at the same time, induced to transcend their sphere, since they also speak of inter-current diseases, which thus sometimes appear during the so-called epidemic constitution, without belonging to it, or being curable in accordance with it; for these inter-current diseases require another treatment than that indicated for the epidemic constitution. Thus with Rademacher, even, *exceptions* exist; they are, however, in a Therapeia grounded upon natural law, a *contradictio in adjecto*, hence must follow from imperfectly established premisses.

If we turn away a moment from these exceptions, we know that Rademacher's doctrine is founded upon *general* ætiological, so-called, *epidemic* momenta prevailing from time to time.

Hence he lacks, even in this sphere, in which besides, the inner conditions of the individual organism remain entirely disregarded, the consideration of the *local* endemic relations, often *limited* to a small circle.

This circumstance, however, does not do the least injury to the fundamental doctrine of Rademacher, as a superficial view might herefrom conclude; but it points only to others than the so-called epidemic causes, which may exist side by side.

As regards this point the following example will furnish the necessary support.

From a one-story wing of a certain barrack, almost every year, patients afflicted with different zymotic diseases were transferred into the hospital; at one time fever and ague, at another varicella; now scorbutus, now typhus, now dysentery, and these two latter forms especially reproduced themselves quite often in remote localities by men who were there on furlough; while, in the entire vicinity of these barracks, and, in the city, separated from it only by a small stream, not a man was affected with typhus or dysentery, at that time. Moreover, these forms of dysentery and typhus appeared quite different from those which sometimes occurred in the city; they possessed a far more pernicious character and were attended with a much greater mortality.

From year to year the localities of the barracks were examined and found healthy. Though this wing faced the north, its walls were always perfectly dry, only the lower stones, those in connection with the ground, were here and there damp a few inches high, as is the case with very many buildings, in which these forms of disease never occur: moreover, these diseases did not appear on the ground floor only, but much oftener in the upper story, so that not the least cause of these diseases could be discovered.

Finally, some rotten boards were taken up from the ground floor, to be replaced with new. Even when the first board was taken up, a cold air, smelling strongly of mould, diffused itself, and soon there came to view enormous growths of wall-mushrooms in heads from a foot to a foot and a half long, and from two to six inches thick, of soft, brown fungous texture; these were extended in enormous masses under nearly all these rooms. The damp earth was dug down two feet deep, and after being filled up with dry rubbish and charcoal, these diseases disappeared from this wing, and for twenty-one years have not returned again.

Thus, the causes of diseases often hide themselves from those who do not yet know, that Nature produces the greatest effects with the minutest causes; for, in this case even, they were not observable for many years, and no one, during this whole time, could in any way, not even by their odor, perceive these morbid matters floating in the air in a molecular state.

In this we may find one reason, at least, for the production of inter-current diseases in Rademacher's sense, and the fault that such occurrences, in his view, were to constitute *accidental* exceptions, solely rested with his time which was able to investigate in a comprehensive manner, into the causes of disease as little as into its conditions; while just the very Homœopathy, so much despised then, was much better informed upon these subjects, at that time even.

The articles appearing in the present, that is, the seventy-first volume of the *Allgem. Homœopath. Zeitung*, by Dr. Bruckner of Basle, upon Hahnemann and Rademacher, are in this direction most instructive, and indicate the good observer.

But Rademacher and the most of his adherents must admit to-day even, that they consider only *one side* of the possibility of becoming sick, to-wit: the external, which consists merely in the ætiological momenta; while they have entirely neglected to consider the other side, the constitutional conditions of the individual, which comprise, in themselves, the very possibility of the influence of ætiological causes—a second ground for the production of Rademacher's inter-

current diseases, which will be subsequently more thoroughly considered, in order to show that all Rademacher's doctrines may be completed by Homœopathic experiences; and, sooth to say, the converse of this is sometimes the case also.

§. 279.

I must further remark that one hears very often, and reads also, that the language of the Rademacherian and Hahnemannian schools is quite too unintelligible. Even in one of the newest text-books of *Materia Medica*, by Dr. Schuchardt, 1858, an adherent of the physiological school, we find the following, word for word, on page 49: "The statements of Rademacher's school, regarding its so-called spleen-remedies, among which, besides China, it chiefly reckons *Radix squillæ*, *Aqua glandium Quercus*, *Oleum succini*, *Magnesia tartarica*, *Galeopsis grandiflora*, *Rubia tinctorum*, *Baccæ juniperi*, perhaps also *Carduus nutans*, scarcely deserve notice, *for well known reasons, and more still, they do not induce us even to make further experimental inquiries, since they have certainly been used by those physicians quite as often in morbid conditions with supposed affection of the spleen, in which the spleen was entirely unaffected*, a question upon which, however, the manner of speaking peculiar to this school does not permit us to decide."

This learned man, who, by the by, has a great number of sympathizers among practical physicians even, does not understand, then, the language of Rademacher and his followers. This I very much regret. *Learning* does not consist in that which has been previously masticated for one by his alma mater, to make it easily digestible; nor indeed in the digestive organs, which have been purposely fitted for such reception, by which, indeed, everything that is not previously masticated for one must become indigestible. Learning in natural science does not depend upon that which one has taken in from his party or those who sympathize in his views, but in a *criticism thereof according to natural laws*, and in the *knowledge* of that which others also know, who are not satisfied with the nourishment of their nurse's milk only, and are accustomed to *think for themselves*. The designation by language never presents the object itself; it refers only to our conceptions of objects. Hence the language of every science has its peculiarities; thus mathematical language is different from physical or chemical; there is one in the physiological school, another in Rademacher's, and still another in Hahnemann's. All these peculiarities find their entire meaning in the foundations of these languages,

which bestow, upon each separate word, its definite significance, by the connexion only, which is necessarily different in every science. Now if this Professor of *Materia Medica* does not understand the mathematical, or the physical language, or that of Rademacher or Hahnemann, by which always a definite range of conceptions of given facts is expressed, the fault thereof is not in Mathematics, or Physics, or in any branch whatever of general science. Nevertheless he does not hesitate to say, page 1, "*Materia Medica* has *chiefly to discuss the effects of drugs*, and this also forms *the chief part* of my book." I can, for example, find the less fault with the substance of his articles scattered over five different pages, in which he speaks of Benzoic acid, as I know very well how to make use of the article; but he must acknowledge that many can learn nothing therefrom which might be useful in practice, without a comprehensive knowledge of that which, with regard to this remedy, has also been observed in other therapeutic schools. How scanty do his aphorisms regarding the *effects* of this remedy appear, in contrast with its proving by Hering given above. Since of all this he has quoted nothing, and cannot understand even the experiences of Rademacher's school regarding this substance; therefore what he says of the main part of his book is *untrue*, and its contents, especially for a beginner in practice, utterly *worthless*. This method of writing books is very convenient indeed, and does not require much reasoning; but as matters stand, these gentlemen had better refrain from giving their opinion upon subjects which, *by their own confession, they do not understand*. Thus his declaration that Rademacher's spleen-remedies have surely been used by those physicians quite as often in morbid conditions with *supposed* affection of the spleen, sinks to an expression of the vulgar animosity of an inmodest and insolent ignoramus.

This remark clearly exemplifies again the cause of the inevitable scepticism of this school. Whoever doubts in *Materia Medica* must lay the blame upon his own subjective opinions; he seeks to explain facts by his own measure, and not according to the laws given by nature. Hence we cannot rely upon the results of experiments, because they are all explained according to subjective conclusions. But what has not been explained in accordance with the laws of nature cannot be considered as the object and property of Therapeutics.

This Professor of *Materia Medica* pretends that he considers as drugs only those remedies which operate chiefly by their *chemical* properties. But chemistry is neither the only, nor the last, arbiter in Therapeutics.

Thus, the exclusive chemical views of this school increase more and more in their unfruitfulness, as shown in previous paragraphs, by endogenous cell-formation, as it were. This species remains unchangeable and unimprovable, because, as we have seen, it despises an interchange of knowledge with others, and not only considers all knowledge farmed out to itself, §. 1-8, but thinks that it may claim, for itself alone, the language of science, in order to render impossible any progress even in its own circle, while the irrepressible progress of all other sciences surrounds it with loudly flapping wings, which, however, are neither seen nor heard by it.

§. 280.

The proceeding of Homœopathy is now, in general outlines, laid down even as regards a *comparison* with that of other schools. In special cases, however, the inexperienced may, nevertheless, fall into no slight embarrassment. Hence I must present one more example, and this will be best selected, again, from the time when I myself was yet a beginner.

A gigantic teamster, 43 years old, of a developed musculature, who declared that he had never been sick before, and whose height was 6 feet 2 inches, on arriving in Frankfort, in the evening, with a freight-wagon, did not go to bed, but, after all the guests had left the bar-room, laid down upon the floor, on which he had spread some straw, to pass the night. It was winter and very cold. On awaking in the morning he felt stiff in his limbs, tired and sick, which, however, did not prevent his walking by the side of his wagon to Ansbach. Now he complained of the greatest exhaustion, and that was the most distressing to him, because it interfered with his occupation; for his loss of appetite, his sleeplessness, his cough, his having chills (continuing every night from 7 in the evening till precisely 8 in the morning), all this he would have endured with indifference, as he declared.

The examination of his organs did not present, objectively, the least thing abnormal. Hence I diagnosticated an intermittent fever, although this chill, which returned every day at the same hour, was followed neither by heat nor sweat, and I gave him, being yet unskilled in Homœopathy, and not having the least confidence in it for fever and ague, two-grain doses of Quinine, to be taken every two hours. There was no change, even after I had him take the powders every hour during the day, and as he had already consumed forty of these, without the least indication of an improvement, as, on the contrary, the general weakness of the patient had increased, the necessity

presented itself to me, more urgently than ever, to relieve him in the shortest time. Consequently, it could no longer be indicated to give him either Quinine or Arsenic in allopathic doses, hence, I sought counsel again with Homœopathy. I did not wish to avail myself of the Repertories to the Homœopathic Materia Medica; for a beginner must read, at any rate, through the entire proving of each remedy which seems to be indicated according to the Repertory. For this reason I consulted the original provings, read through the article on fever of each remedy, and compared it with the case before me. Thus, I found, at length that *Aranca diadema* must be the remedy indicated for this case, according to the law of similarity. I immediately ordered the mother tincture from the nearest Homœopathic Pharmacy, and next day, in possession of it, prepared the second decimal attenuation, and gave it to the patient, with the direction that he should take thereof four or five drops every hour.

The next day the patient exclaimed, "Now you have hit the right medicine; as soon as after the second hour I felt warmth again in my whole body, and then, the first time for three weeks, I slept some hours at night again, without any chill." The cure was complete in six days, and for seventeen years he had no relapse.

§. 281.

We see, from all the foregoing, that Homœopathy has many rules to find remedies for cases in which neither of the other two parties can help itself; that its knowledge possesses positive elements of theoretical as well as practical acquirements, which necessarily bring forth the greatness of its practical results. Thus it creates for itself a substance and extent of knowledge of which none of its opponents has any conception.

Within its domain there exists no subjective opinion, which is permitted to palm itself off as criticism. In this circle, no physician is gratified, instead of his own views, to be able to quote a strange authority; it would find no acknowledgement; in this circle only the eternal laws of nature avail; here, in difficult cases, the question does not arise, what has already happened in such cases, but each one considers for himself what can happen and must happen. While the physiological school leans merely upon the expectation of similar cases, the Hahnemannian school, from its present stand-point, rests upon the laws of nature; thus the centre of gravity of therapeutics vacillates in the former school, in the contingent, while here it rests immovably upon the rock of natural laws. There good work, a favorable issue

may be desired, here, it may be expected. There, general outlines and ideas are valid, here, no hint of nature is cast away as worthless. There, we find asthmatic anxiety, the haste and uncertainty of skepticism; here, calmness, consideration and certainty of knowledge; there, every medical procedure is accompanied with torments, here, so little annoyance that the child, even, makes no resistance to it. There, by the expense of a single sickness, a whole family is frequently plunged into debt, which it has no hope of liquidating; here, every patient and every hospital can be furnished with drugs at least ninety per cent. cheaper than there, and rational statistics show here, a mortality very considerably less than there, a fact which likewise finds its causes in what has already been said, consequently possesses not only statistic value, but also a value based upon natural laws. There, many dark shadows are cast, to settle the causes of which is not considered worth the trouble, or the causes of which entirely escape observation; here, all those causes may be brought to light.

§. 282.

There is no doubt but that all Therapeutics strive for the same end, only they follow, according to various leading principles various roads, side by side, and their end attained, they present their truths as mutual *complements*; for, otherwise they could not have the same end in view, or some considerations must then be regarded other than those of Therapeutics, and thus, at any rate, it appears. Whether these considerations are objectionable or not, each one must judge for himself, and this is not the place to consider the question, but there are considerations of possibility, and some of these have not been touched upon, and especially those regarding the separation in medical literature.

The hermetical seclusion of the literature of medical parties seemed to have reached a beneficial end, with the programme which several years ago was issued by the editor of a new medical Journal, in a German capital, with the promise of refraining from everything of a partisan nature. That was, however, not realized. It is well known that Rademacher's school takes notice of that which appears both in the Physiological and Homœopathic Journals, and Homœopathic Journals also furnish extracts from the two other therapeutics. But the majority, physiological medicine, isolates itself completely, for it deems everything to be nothing which does not proceed from itself, hence has originated its stand-point, scientifically subordinate, and still more its unserviceable and unpractical character, which has

frequently served in this work for the purpose of proving the prevailing errors by example. The Homœopathic literature clearly is the most diligent in enriching its knowledge by the experiences of others, and indeed no other way is compatible with the possibility of an active progress. It goes so far, in fact, as truthfully to record the methods of persecution of its opponents, so that these heroes shall not escape the history of science, yet this might be done with greater completeness. It is, for example, not long ago that we heard complaints of the unpardonable, intentional neglect of Hahnemann and his immediate followers, that, in their drug-provings, they undertook no investigation of the urine, because it was not yet known what drugs, during their proving, had the effect to produce sugar in the urine, and that we had to dispense with this knowledge for the purpose of an indication in the cure of diabetes mellitus, till new provings had directed their attention to this point. But, in the February number of Heller's *Archiv für Chemie und Mikroskopie*, I found statements on this subject as early as 1852. It is here stated that sugar is found in the urine after the inhalation of any anæsthetic vapors whatever; after the use of Arsenic, Lead, Antimony, the salts of Mercury, Quinine, Opium, etc. Now the most valuable effect of great quantities of the strongest wine were made clear to me, at once, and this communication was all the more desirable, as I was just then trying my skill on a diabetic patient, without being able to help him.

The cavity of his mouth was already as dry as the outer skin, and to such a degree that, in spite of all his efforts, he could not moisten the least bit of bread in his mouth or eat it. Tormented with the hallucination that some one near him ate and washed, and, in brief, performed all his functions for him, and still more, tortured by a terrible thirst, he had, at the same time, reached such a degree of emaciation and loss of strength, that I counted my hopes of keeping him alive only by the hour. The Homœopathic differential diagnosis induced me to choose Arsenic, among the remedies mentioned. This I gave him according to the laws previously set forth, and experienced the joy of restoring this man (who was a debauchee, and forty-eight years old), to his occupation, at the end of three months. I would herewith urgently recommend it to Homœopathists, so long as the different schools of Therapeutics persist in their unjustifiable literary separation, to make careful selections from the literature of our opponents as has been done by the *Allgemeine homœopathische Zeitung* to a very praiseworthy extent.

THE BODILY CONSTITUTION AND THE CONCOMITANT CIRCUMSTANCES.

In the preparation of a text-book one must carefully avoid all pedantry; and must rather at first present all facts, which are to be laid before the reader, in an isolated manner, as has been done thus far. Without following any system, one must at first proceed analytically, because analysis, the dismemberment of our ideas, is that which, for our intellect, is the original, and the logical synthesis that which is the *derivative*.

That in the idea of a one-sided causality, which conceives of the organism, as regards its various parts, as a checker-board, with the squares mechanically laid out, side by side, cannot be contained that of a reciprocal causality; that, hence, no diseased organ can be considered as diseased by itself alone, but as one of the members of an organically connected chain, will have been made as sufficiently clear from what has been already laid down, as that the law of reciprocal causality, that of reciprocal action, is the most hidden power of nature, by which the necessary whole makes itself known even in the play of the molecules of the most minute parts.

This *reciprocal action* is the living contrast to the tacit *dismemberment*, and although species are the work of Nature, yet genera are the work of man, by means of which he knows how to understand and control the works of Nature; for all perception is intellectual also, and not merely sensual.

With every *mode of perception*, even with that of Homœopathy, the separate objects of the senses, the particulars were brought forth the first.

In Nature, on the contrary, the first is the creating *general*; for what we misunderstand or do not understand becomes doubtful or obscure on account of the insufficiency of the *particular*.

That, hence, in Homœopathy also, there is much which is not yet understood, or is misunderstood, arises from the fact that, for the most part, analytical comparison has spun the thread on which it has progressed; for the establishment of Homœopathic diagnosis, prognosis and indication has mainly arisen from the comparison between pathogenetic and pathological forms.

The comparison of Homœopathy does not follow, indeed, from an indefinite view; on the contrary, it positively expands the insight into the otherwise unknown region of disease, by its synthesis, with the

sum and substance of the law of similarity. This region, however, is so unknown to many, that some desire that one should direct his steps according to the essence of diseases; others, that he have merely to treat patients and their diseased organs; but of the general source from which all diseases flow, of the relations of molecular substances and their forces to each other, there is no earnest thought.

The phenomena of the pathogenetic and pathological forms are separate there; the less known are compared with the known; there is, by comparison, a connection sought with the law of similarity, but the *oneness* pervading these two pathological forms is not always investigated.

This Homœopathic comparison, however, can never terminate in identity; this the beginner must ever remember, for pathogenetic and pathological forms have *no identical cause*; hence the homœopathic comparison leads to a higher conception, to that of the general [cause] which brings forth the phenomena from various [special] causes.

The necessity of success from the Homœopathic diagnoses, indications and prognoses hence arises from general grounds.

That that which was the first in the act of being is the last as regards perception, proved itself true also to the great mind of Hahnemann. He first gained perception of the existence of drug-and-disease-forms in *particulars*; but his subsequent conception of the *general grounds* for these particular forms of existence was a new synthetic, so to say, artistic act.

If the essence, the general [character] of a thing is to be developed, then it is only requisite to know how the thing itself was developed, and neither is it free from danger to make suppositions, which lie outside of the thing, and, as it were, serve as a mere superstructure for observation, as is wont to happen in the special Therapeutics of the physiological school, nor is it permitted to overlook suppositions which lie in the thing itself, or make up its very existence even, which, indeed, is attempted by some Homœopathists to their own injury.

A logical procedure in separating the general from the particular, the necessary from the contingent, the rational from the empirical, must mark out for us the direction of our conclusions at the sick-bed with lines which cannot be transgressed. This is a postulate upon every science, which nowhere is more neglected than in the physiological school. One example, at least, to this effect, may not be superfluous here.

The periodical change in the condition of the pressure of the blood, as it is called by physiologists, gives to the circulation, for example, a

regular recurrence, dependent upon particular days as well as on particular times of day, thus a stationary form, which by the Professors is called *The type*, and which, as well as the Crisis, makes its appearance most clearly in pathological states. But this does not happen in consequence of any acting morbid substance, as, for example, the excretion of Chloride of Sodium is most copious in the afternoon; at night, on the other hand, it abates considerably, and, in the morning increases again; all of which is founded upon the *general* of physiological life.

This kind of blood-circulation during a disease, is declared by the Professors to be a pathological state even. But disease is only a *particular* [state] in the *general* [state] of the organism, hence it could present proportional oscillation *of no kind* in its symptoms, if the organism should not originally perform these movements. If we observe in disease that hyperæmia, stasis, inflammation manifest a decidedly periodical character, since the affected parts increase and decrease in periodic returns as regards swelling, tension and pains, then these processes clearly point to a *generality* that controls them, and this can be founded only in the *bodily constitution*.

The idea of a *positively healthy* bodily constitution is hence nonsense, for even under the relative idea of a healthy man we understand that he possesses the conditions for becoming sick, and how could we comprehend the actual variety of the individual bodily constitutions, had we not also learned the general forms thereof by drug-proving.

For this Hahnemann again laid the foundation by his doctrine of *concomitant circumstances*, and no one has understood how to carry out more strictly the consideration of the indication from these circumstances than Dr. v. Bönninghausen. His therapeutic Pocket-book (Münster, Coppenrath, 1846) is an imperishable work of the greatest importance for practice, and could be prepared only by an eminent intellect, and by unwearied theoretical and practical studies.

But we must *reflect* upon its contents, and, in want of a teacher, must ourselves *find* by experiment what lies at the bottom of these separate specialities. We must not only comprehend *registraliter*, the effects and counter-effects for the purpose of drug application; we must study not only the movements and counter-movements, which they cause within the organism, but also at the same time the *general* external *influences* upon it prevailing in this process; *for our organism is nothing but a system of external effects and internal counter-effects*.

In order to render Hahnemann's doctrine of concomitant circumstances more readily comprehensible, I proceed at once to practical examples.

The ignorant are much amused by the fact, likewise established by the drug-provings of Homœopathy, that certain substances possess a preponderating influence upon the *right* or *left side* of the body, although at the sick bed, any one can see the most manifold complaints every day, which affect one side only; although, for example, to quote an authority (for those who believe in authorities), even Schönlein, amongst others. teaches, in this respect, that it is remarkable, how, even in ganglion-intermittents, the participation of the capillary system is sometimes on one side only, so that one half of the body is in a fever and the other half not.

Thus, if there can be morbid matter, which produces diseases on one side, why should there not be substances which cure such diseases?

Before one judges of a thing he should have investigated it, according to the directions of those familiar with the matter, and whoever has himself proved Arnica, Sulphur, Belladonna, Plumbum merely, will acknowledge this fact as incontrovertible.

But these experiments are presented in such great number, and have always so confirmed the same appearance of symptoms, on the right or left side, according to the remedy used, that this constant course of the same phenomena, from the same causes and conditions is elevated to a natural law, and, to-wit, always to one single law of specification of a changed form of the reciprocal action, from the connection of these substances with the organism. Moreover, these results were always verified at the bed-side according to the law of similarity, so that one, according to the laws of nature and logic, would be justified in expecting that there would be no further room for skepticism about the matter.

Yet for those who, not versed in these laws, desire still further proof, for those, I may state that, for example, by Professor Horn's reaction-apparatus, the motions are exactly shown which course through the fingers of the right hand and the right fore-arm, as electro-negative streams from right to left: through the left fore-arm, etc., as electro-positive streams from left to right, etc.

If we remember now the chemical properties which present themselves as consequences of the electric streams in the body, those results of drug provings find new and sufficient confirmation; but

they offer us, just *because* they were made with such substances of the outer world, at the same time, drugs for corresponding cases, and that, indeed, all the more, as it was established by Horn's multiplier that, in *diseases*, and, even under depressing mental emotions, one finds those relations of polarity and electricity moving just in opposite directions.

As an example thereof the following case may serve. One of my assistants, a novice in Homœopathy, had to visit a patient, 32 years of age, who had been paralyzed on the left side for two weeks, but otherwise was well and robust. The patient having to make a journey of six hours in a pouring rain, arrived at his destination perfectly drenched and chilled, and on awaking next morning, after a good night's sleep, and trying to rise, his whole left side was insensible and motionless. He was treated with the induction current, and every time while in the bath, but too energetically; for the excitability of the paralyzed side had suddenly ceased, and its musculature began to grow less. The patient, for a long time, has been indisposed in damp, cold weather, more than in dry and warm; he is excitable and timid; has had vertigo since the beginning of his sickness; the temperature of his body is unequal; only the upper part of his body is warm, while the lower extremities are cold; he suffers with obstruction, and, at night, with involuntary discharge of urine, precipitating a red sediment.

In consequence of this I directed the young gentleman to give him *Arnica*. However, still too close an adherent to his former teachers, he gave an infusion of *Arnica* of two drachms of flowers to six ounces of water, and ordered the patient to take a tablespoonful every two hours.

Five days later he stated to me that he thought he saw considerable improvement in his patient, though he had been tormented, since the day before, with toothache and swelling of the gums on the left upper jaw, notwithstanding the left half of the face was still paralyzed. I assured him that he must have taken the dose too low. As, however, the patient passed a sleepless night on account of the toothache, the young man drew the tooth pointed out by the patient as the one aching most, although there was not the least decayed spot in it. But now the pains increased in the whole upper jaw till they got to be unendurable, and, as my colleague gave me a full statement of the case, I assured him that every indication to draw the tooth had been wanting. To convince him of this I bade him read through the proving of *Arnica* in Jahr's *Symptomen-Codex*; for the effect of this

drug was too evident and could have been produced only by an immoderate dose.

Upon reading that proving, his surprise was so great that, from that hour, he has been a true adherent of Homœopathy, for he found, as the effects of Arnica, among others; tearing and throbbing in the left upper molars—just the literal statement of the patient—toothache, with swelling of the cheeks, paralysis of the left half of the body, coldness of the lower part of the body with warmth or heat of the upper part; vertigo on getting up from a seat, constipation, involuntary discharge of urine at night while sleeping, red sediment of the urine; as proof of the effect of Arnica upon the same parts of the organism as were here affected by the morbid cause, and that, too, in a very similar way and manner, and furthermore, as proof that he really had given the Arnica in too strong a dose.

There are many circumstances *aggravating* or *improving* the condition of patients, which lead to the essential indication, and that, as regards the time of year, this or that food, dry or damp weather, these or those parts of the body, for example, even as regards the body, whether in rest or motion.

One morning, when two Allopathic physicians were accidentally present, an old woman came and complained that her son, twenty-two years old, a robust day-laborer, whom I had visited the day before, and had found suffering with articular rheumatism, had not slept any all night, on account of pain, for he could no longer endure it to remain in bed; had had to leave it constantly, and move about as much as he could, for in this alone he found the greatest relief. Yet he was soon obliged every time to lie down again, since prolonged motion wearied him, and fatigued him too much.

I stated to my colleagues, who were present, that to this patient, since he felt worse when at *rest*, and was relieved by motion, I could prescribe none of the remedies which would be otherwise indicated in the case but *Rhus tox*; that in a reversed case, Bryonia would be indicated, and invited them and the woman to come again at a given time.

They came, and the old woman was overjoyed to be able to announce that her son, after he had taken this remedy through the day, had passed the entire night without pain, and that she had heard no more complaint from him before leaving him. The patient was perfectly cured in this short time, and both colleagues begged me for Homœopathic literature.

The question, what is produced by the remedy, and what is accidental, is, as yet, an open question in the physiological school. It does not know the rules by which the elimination of the contingent from their conclusions could be rendered possible, and according to which the question about the result would depend upon determining what kind of events must emanate from the results of indications according to the laws of Nature, or which ought to be looked upon as the results of accident, or of palliative adjuvants. In Homœopathy, such questions have become superfluous, for there one has only to direct himself according to natural laws, and what speaks against the constant course of events, at the sick-bed, upon the strength of the given elements of the law of similarity and its co-indications, belongs to the accidental and all its concomitants.

There is, moreover, clearly a difference whether a thing is accidental, or only appears to be. In the first case there is no law; in the latter, we do not know whether there is such a one, if we are not able inductively to find or to abstract it.

As regards this point, also, it is necessary to introduce an example.

A young girl suffered for several months with Chlorosis in a high degree, with symptoms for which Pulsatilla was indicated. She took this remedy according to prescription, and came again after eight days without having observed any improvement: only she thought that she was less troubled with violent palpitation of the heart. After eight days more, the menstruation, which had been absent for a long time, returned, but only feebly, and even then the patient, though feeling better, was yet not strong enough to resume her work. She came no more, but I met her about three weeks after; she looked perfectly well, and carried a heavy water barrel upon her back. That change, accident surely could not have accomplished. Upon my inquiring about her condition, she replied, in a joyful manner, that those drops had helped her so much that she had been quite well for a long time. I assured her that she was telling a story, and these words, spoken with emphasis, drew from her the confession that after her last visit to me she had received some pills of iron from a neighboring woman, and had taken them. That I knew *a priori*, for if one divides the intensity of the effect of Pulsatilla 3rd by the element of time during which Pulsatilla 3rd can produce a perfect cure of this kind of Chlorosis, it requires a much longer time than for the effect of Iron in Allopathic doses.

But, now the patient coughed and I did not wish to disturb her joy with the assurance of what I knew to be the necessary result of the imprudent use of Iron, to wit: that her lungs would become diseased, or, that, in the most favorable case, she had reason to expect a violent relapse.

All physicians, truly enough, point to "experience;" but the experience of the Homœopath is quite different from that of the Allopath, or Hydropath, of shepherds or old women. If by "experience" one would understand, not merely a collection of facts, but the connection of facts according to necessary laws, then he would at once have silenced the clamor of empirics and old women about their experience.

§. 286.

Hahnemann, as we have remarked, was led to these concomitant circumstances by the very results of his drug-provings. Till his time they had remained entirely neglected in making up the diagnosis and indication, and still are so, in the physiological school. But, from what other momenta could the speciality of an individual be more readily discerned? Whoever means to individualize at the sick-bed must necessarily also direct the examination of the patient according to these concomitant circumstances. The individual always possesses certain conditions for becoming sick; they are contained in his bodily constitution, which is rightly to be known just by this very individualizing; but the bodily constitution expresses the relation of the inner conditions to the external causes of becoming sick; hence, only *upon the sum of the conditions, external and internal, depends the total effect, which is designated as disease however, neither upon the causes alone, nor upon the conditions alone.*

If there is an individual, for example, who is attacked with fever and ague, and, while sitting and in bed, has always cold feet and soles, that is surely a peculiarity, for many fever and ague patients do not complain of cold feet and soles. Hence, if on account of the other symptoms, the choice in the indication were to lie between Ipecac and Arsenic, every Homœopath, on the ground of that concomitant circumstance, would prescribe Arsenic, but not Ipecac, because, in the proving of Ipecac, there is no complaint of cold feet and soles, whether sitting up or in bed. This single peculiarity, a peculiarity which can only be grounded in the bodily constitution, thus directs the indication into the proper channel.

Hence it follows that such symptoms even as, according to Hahnemann, must be reckoned among the concomitant circumstances, are

constitutional symptoms; and not those alone which spring from aetiological momenta.

A *sick* bodily constitution is just as inconceivable an idea as a healthy one, although ideas to the contrary have often been advanced in controversy; for the bodily constitution still belongs in the realm of the relative idea of health, as long as it is changed, of course, neither in form nor in function. A similar *contradictio in adjecto* would be the idea of a pathological disposition; for *before* a disease can develop itself, the conditions thereto must previously be present.

It is in the main the characteristic of that Therapy which must be universally sought and can be found only in Homœopathy, to see the general always in the particular; for he who sees only the particular in the particular, because it only as such belongs to objective reality, does not know that the investigation of single phenomena cannot make known the mutual relations of events.

The tendency towards the particular, by which the physiological school is distinguished, makes it so one-sided that it sees in events only that which seems to have happened with an end in view; everything else disappears for it and that falsifies its perception; for it is not the objects alone which we have to investigate, but their relations and references to all others.

Even the effect of drugs is always a general one. All drug provings have demonstrated that there are only *constitutional* drug effects. Once entered into the organism they affect it specifically, member after member, according to their quality and their relation to the organism.

It is interesting to learn that *this truth*, although connected with orthodox Homœopathic views, found its advocate in France, even among the Allopathists as early as 1863.

A lecture by Dr. Pidoux, one of the authors of the well known *Materia Medica* of Trousseau and Pidoux, contains the following points:

“Not the drug by itself, but *the organism, modified thereby*, produces the cure, and it is necessary that, from the views of the laity, the opinion, and from the views of physicians, the error should finally be eradicated, which lies in the belief that the drug acts by itself and directly upon the disease, and more still, upon the diseased product, neutralizing disease after the manner of an antidote.” etc.

“If it is true that remedies can act favorably only when they are assimilated by the organism and *are subjected to its own laws by the help of the parts remaining healthy*, then this truth is nowhere more apparent than in the treatment with Thermal Springs, where

the *immediate* effects of the cure, often so annoying, and so directly in opposition to the hopes of the patients where the necessity of a long incubation, where finally the curative reaction occurring late and being the reverse of the primary effects, very evidently demonstrate that the drug does not work therapeutically by its chemical properties, but that, by means of the special forces of the organism, it develops, in a *living* manner, *vital* effects in the very sense of the word."

If vital is something else than constitutional, and if the organism in general consists of processes of oxidation and reduction, are these not chemical?

Thus, indeed, the *quid pro quo* is ready, that the German professors must receive from their French colleagues confirmation of that German discovery of Hahnemann which they so blindly reject.

§. 287.

Yet it seems that misunderstanding may arise for beginners, even upon these subjects. If we take, for example, some remedies which restrain the entrance of Hydrogen into our systems in any way, as China, Nux vomica, Arnica, Thuja, Natr. sulph, etc., no one could, nevertheless, from the symptoms which they produce, *construct* the concrete *picture* of a single bodily constitution, since the indication for Nux vomica must be of quite another kind from that of Thuja, etc. Hence, with every special *construction* only a fictitious order would arise; for the deficiencies which would meet us in so doing we should have to supply, by our imagination. Thus, all constructions, whether they are directed to images of disease or of a bodily constitution, from a given series of symptoms, must remain faulty, and hence, for the most part, turn out to be false.

Hence, in disease we can take hold only of that which our senses can comprehend, and we have then to *abstract from this*, as already shown, the general, the bodily constitution presenting itself, from which emanates, for each individual, a different combination, *i. e.*, *constitution*. It is, hence, this *general* upon which the indication must be based, because it precedes the *particulars*, and this general is, as has been said, most clearly to be recognized in the conditions accompanying each form of disease by which the quality of the *ætiological and constitutional* conditions together become clear to us.

Hence, to the physicians of the physiological school who, from lack of knowledge, have doubts upon this point, the Homœopathic drug provings are merely a frame work of registry in the many intricacies of which their minds cannot find their way. Hence we must

give yet another little example for the further elucidation of the concomitant circumstances.

In Dr. v. Bönninghausen's Therapeutic Pocket-Book, especially prepared for the study of the concomitant circumstances, we find, on page 353, under the rubric "Aggravation" in *dry* weather, among other remedies, Nux vomica also, and printed too in spaced italics to show its supreme rank as regards its efficiency in damp weather. Nux vomica again, with close Roman type, to indicate that this still needs further confirmation.

Now the question is, what do we learn from these statements?

If I should assume the position of a skeptic, I should answer, nothing! For those are indeed mere *subjective* symptoms. Hence, we can only recognize such substances as drugs, of which it is *objectively* demonstrated that they operate under *all* conditions and how; ergo, that they operate specifically upon determinate parts of the organism.

Yet the proof is at hand, that the skeptic, with his observation directed merely to objectively perceptible symptoms, loses himself in the same labyrinth in which Allopathy, and, hence, in fact, every opponent of Homœopathy has heretofore wandered about in distress from which no Ariadne can deliver them, because they forget to take with them the clue, and, indeed, can not even see the necessity thereof.

Since, moreover, Nux vomica with certainty produces aggravation in dry weather, it must certainly produce an improvement in damp weather, hence be indicated in diseases which could develop themselves in a bodily constitution which feels disturbed by damp weather, and this daily experience teaches.

This aggravation occurs not only in separate organs and tissues, but also in general.

Yet surely the skeptic would not fail to reply, "were that true, then Nux vomica could not, even in damp weather, produce an aggravation, though to a less degree; hence, neither the one nor the other of these assertions, about the two-fold effect of Nux vomica, can have any objective value."

Whoever has read the foregoing will know that this skeptic, even with this objection, has presented no counter-proof, since he does not know the grounds of classification in the sphere of aggravations; for, in a bodily constitution, in which dry weather produces more ailments, the *conditions* are not given under which Nux vomica could prevent an immoderate introduction of Hydrogen into the system, because, as regards this constitution, this task is performed already by the self-

activity of the organism, which thus, *in this respect, is quite healthy, i. e.*, must be free from all dispositions *in this direction*.

On the contrary, we know that the remedies in the *higher* attenuations are least capable of exercising an influence upon the parts of the organism remaining healthy. However, in these individualities, still quite other effects appear under the proving of Nux vom. with the *lower* attenuations, such, for instance, as are *less general*, but more confined to single parts of the organism, for example, affections of the stomach and bowels, affections of the liver, uterine complaints, pollutions, etc. Here it may, indeed, happen that, in similar spontaneous diseases, Nux vom. begets aggravation in damp weather also, but from quite different divisive reasons, because, it does so on account of quite different causes, to wit, if, for example, Nux vom. is taken *in too strong a dose*, or for too long a time, or too early in the morning, or too late in the evening, or especially if it were not indicated.

One may see, at the same time, that the skeptic does not lean at all upon essential reasons, but always only upon his own peculiar, *accidental*, perceptive reasons, (*rationes cognoscendi*.)

§. 288.

But the doctrine of the concomitant circumstances still needs amplification.

We have occupied ourselves, thus far, only with relations of space, with the disease-forms and the momenta inducing and occasioning them, in their bearing upon the organism and its surrounding, *i. e.*, as regards their relations towards each other, and *by the side of each other*, in a certain space.

But everything which happens, takes place without us, as well as within us, according to *time*. With time we see a number of conditions within and without us, subject to a constant *change*. To perceive the legitimate form of connection of this change within time, is hence of the greatest importance, and brings to light a number of momenta constituting a disease-form, to which allusion has already been made in §. 200.

Regarding this point, I need but refer to the observations of every physician of extensive practice, that all forms of disease come and go in groups, and appear periodically. This periodical change cannot be founded in our organism, but in the change of the qualities causing diseases, lying outside of us: on the other hand, quite naturally, correlative with this change, now one, now the other, of the bodily con-

stitutions will be thereby affected, and one or the other must remain intact.

For example, apoplexies appear unexpectedly, and successively, for a long time, then disappear again for a longer time from the stage. Thus it happens with inflammations, small-pox, measles, etc. But while they never make up the *only* forms of disease, which are wont to appear at the same time, but only the most frequent, they all manifestly arise together, now from the same external causes, now affecting only *such individualities* as, by virtue of the quality of their *bodily constitution*, are similar to each other, if they be not entirely the same.

That this relation of coincidence between the qualities of the different states of the atmosphere and the bodily constitutions, in the Homœopathic drug provings, could not be made prominent enough, has, for those who could not make themselves acquainted with these mutual relations, produced a great misunderstanding in their judgments of these drug provings; for they naturally contain, by virtue of these relations so-called contradictory symptoms, very often from the same substances, and again the same symptoms from different substances. (Vide modes of action of remedies. Part I., p. 181.)

But to him who has ever devoted himself to the study of the *bodily constitutions*, these *apparent contradictions* are converted into the most *precious indications*.

Thus, there is an infantile croup, for instance, with which, at the same time, aside from other affections of the larynx and the air passages, appear *also in other persons*; various spasmodic disease-forms, spasmodic asthma, hooping cough, even chorea, cholera, etc.; there is also a croup, under the prevalence of which other persons suffer with fever and ague, especially the so-called dumb-ague, with periodic facial neuralgia, and other neuralgiæ; an infantile croup with which, at the same time, felons make their appearance, angina, urticaria, and erysipelas.

On the ground of practical observations at the bed-side, I place this periodical occurrence of various disease-forms amongst the concomitant conditions of Hahnemann; they also refer us to the drug-provings, and we shall, in fact, always find that these ætiological so-called epidemic conditions accompanying the croup of children, for example, in the first case, give an indication for Copper; in the second, for Ipecac with Iodine or Bromine; in the third, of Hepar Sulph. Or, to give another example, in one year I cured hooping cough in a short time—fourteen days at the longest—with Drosera; but the next year this remedy accomplished actually nothing, since, according to other accom-

panying ætiological circumstances, China or Arsenic were indicated, and then the same prompt result was obtained as previously with Drosera.

Croup, so fatal a disease with children when it is improperly treated according to the doctrines of the physiological school, often runs its course, as does hooping cough, with very few accompanying symptoms which can be recognized in children, and which could lead to the right indication, and these two forms of disease, hence, very often present no other symptoms than those of their special form, and thus the directions just given must be of the greatest value as regards general and farther reaching points of support.

Hence, according to these alone, one cannot accomplish cures according to names or forms of disease, as is attempted in the physiological or Allopathic school.

The physician of this school gives, for example, in Chlorosis, his Iron without further examination of the patient; in Croup, to be sure, he is more in doubt and is driven into close quarters, but he always gives emetics, or, empirically, Copper, because he knows, from hearsay, that cures are *sometimes* effected therewith, but without knowing the scientific grounds therefor; as regards Cholera, he cannot arrive at any conclusion. If such a physician really has accidentally succeeded in curing a case of Chlorosis or some other disease, he thinks that, with the disappearance of such diseased forms, the patients are *cured* at the same time.

That is radically false! for we have to remove not only the special forms of disease, but, above all, the *general conditions of diseases*, thus also the *disposition* to sickness, and, only when this is done, is the patient *cured*. §. 57.

Chlorotic patients, those for example, for whom, according to Homœopathic drug-provings, Iron is indicated, are very often disposed, *just from this very reason* to Phthisis pulmonum, to hæmoptysis, uterine hæmorrhages, to so-called scrofulous inflammation of the eyes, diarrhœa, ascarides, etc.; Chlorotics, for whom Copper is indicated, are likewise not seldom inclined, *on this very account*, to affections of the larynx, the bronchi and their branches, to cholérine, sweat of the feet, etc.; Chlorotics, finally, for whom, according to the drug-provings, of course always in conformity to the law of similarity, Pulsatilla is indicated, are inclined, *on this account*, to intermittents, melancholy, hysteria, diseases of the heart and kidneys, discharges from the ears, etc., for if Iron, Copper and Pulsatilla are ever indicated, it can only be in those forms of disease which are perfectly similar to those which they themselves produce.

These experiences are of the greatest importance, especially for the prognosis of the family physician, regarding the constitutional condition of those entrusted to his care; for he is fully justified, according to the law of similarity, from the indication of a remedy become necessary from constitutional symptoms, to question his patients at once, and most minutely to examine them objectively [by all the physical aids of diagnosis], according to the whole sphere of the effect of this drug. He will, then, in many cases, forthwith discover the germs of such diseases in a manner he would never have thought of, had not the entire sphere of effect of this remedy, led him upon their track. But thereby he is also enabled to order prophylactic measures, which will be attended with a success often not to be attained at a later date.

§. 289.

Even Wunderlich appeals to a constitutional Therapeutics. In his "Archiv für Heilkunde," of the year 1860, Heft 2, there is an article in which he says, among other things, "the objective points of Therapeutics, *causal* and urgent symptomatic indications excepted, are not the local disturbances which have given the name to the disease, but it is the entire organism to which the effect must be directed."

This assertion sounds as if it had been taken literally from Homœopathy, but how does he seek to sustain it?

He thinks "the degree of prostration, of nervous excitement, the conditions of the circulation, the fever, the collapse, the composition of the blood, the products of exchanges, the increase and decrease of the bodily weight, are the points upon which our prognosis of diseases mainly rests; to these the chief ends of Therapeutics have to accommodate themselves."

But these again, however, are mere *products* of disease, hence it is impossible for them to lead to a constitutional Therapy, and he seems himself to feel the unfruitfulness of his train of thought; for he proceeds: "Here is the wide, and as yet almost entirely neglected field for practical observation, and for the establishment of the most trustworthy rules, and thus analysis and measurement have also to consider the relations of the constitution."

To seek to establish the condition of the bodily constitution from the products of disease, instead of from the conditions of the disease, is clearly a preposterous, and hence senseless undertaking.

Moreover, with his declarations, Wunderlich has at all events upset his previous programme. Although it is always praiseworthy to

confess previous errors, yet he has remained always upon the old stand-point, the very one which he seeks to avoid; for the method proposed by him must, in like manner, lead to errors, as does the local pathology, because therein only the *construction* of figurative representations is kept in view. Truly it sounds very finely, but does not at all further his ends, merely to say, "a Pathology, which is at war with the most necessary requisitions of a sound logic, which can only give distorted views for the judgment of separate cases; a casuistry, in which frequently just the most important questions and relations are overlooked, can awaken no confidence in the remedies recommended," for this sound logic and this confidence-begetting casuistry is not, in fact, realized in his text-books, but only in Homœopathy.

Ground, cause, and conditions must be perceived according to the definitions of mathematical speculative philosophy, if one would arrive at a conclusion upon such subjects; to measure, to count, to sound, to listen, to taste alone, come far short of attaining the end.

The bodily constitution contains only the disposition, only the *conditions*, only a relation to the *external causes* of a sickness, and the grounds of the sickness and cure lie only in the laws of nature, hence they can be rightly known only by acquaintance with these relations and dependences.

That is the logic of it; a further casuistry is superfluous, indeed evil even, for it would only again and again beget skepticism and dogmatism.

Thus, if Wunderlich would accomplish anything in the domain of Therapeia, he must, *nolens volens*, become a Homœopath.

The whole bearing of Homœopathy ever shows, as I have fully demonstrated, that it alone knows the law of the co-ordination of the constitutional and ætiological fundamental quality. The separation of these qualities, carried out to the degree of founding thereupon various *curative methods*, must hence, according to nature's laws, be deprived of any sure result. For this reason, the doctrines of Hahnemann form complements with those of Rademacher in many directions.

§. 290.

THE VARIOUS BODILY CONSTITUTIONS.

"If *Biology* were complete," exclaims Virchow, the most celebrated of all the writers of the physiological school of the present day, "if we but knew the laws of life and the conditions of their manifestations exactly, if we knew exactly the consequences of every change of these

conditions, then we should have a rational Therapy, and the unity of medical science would be established!"

Strange that one wishes to know the laws of life, but does not even seek a guiding principle according to natural laws, in order to be able to learn them! On the contrary, he starts from the mistaken hypothesis that all laws of life are to be explained from the idea of *health*, hence from an oscillating condition, ever changing in course of time, hence from a negative state, and, although he is not conscious of it, he yet can attain only negative results always, let the experiments be ever so extended and continue for centuries.

As an example herEOF, I adduce the pamphlet of Dr. Bischoff and Dr. Voit, on "The Laws of the Nutrition of Carnivora," [Die Gesetze der Ernährung der Fleischfresser] which appeared under this title shortly after the publication of my "Fundamental Laws," etc., [Grundgesetze, etc.,] and contains the confession that the previous experiments were undertaken under the supposition, borrowed from chemistry, that the *weight* could give some indication to the inner processes of nutrition. Not till they had made a long series of experiments, which proved the *contrary*, did they hit upon the idea that *water* and *fat* as compensating means, might have occasioned the unexpected sources of mistake, an observation, as is shown in §. 44 of this very work, which I long ago deduced from my observations at the bed-side.

According to the law of proportional oscillation, disease is a positive addition to life. Hence, biological laws can not be drawn from the ideal of health, but from the law of specification of proportional oscillation and of their *change* through *permanent causes*. But, since, according to the law of equality of action and counter-action in the organism, cause and effect are correlative, and we are able to learn a difference between physiological and pathological life only from the laws of reciprocal action with the outer world, so there is given us, in the experiences of Rademacher's school, in its *ætiological* laws, a clue to the so called *biological* laws. Even Virchow expresses this very conviction. "If we wish pathological systems, we must, as is readily comprehended, construet not nosological but *ætiological* systems." But to ætiology and biology belong not merely the atmospheric and telluric influences, but also those inherited from parents and grandparents, the individual *permanent* qualities. However, the studies of the physiological school upon inherited diseases have ignored the *history of medicine* as it, upon the whole, confines itself, with its knowledge, merely to the meagre present. For this school, the whole history of medicine, so rich in instruction, has become a lumber-room

of antediluvian stand-points. A hereditary transfer of disposition to disease is known to it only as regards separate forms of disease in an ontological sense, *e. g.*, for gout, hæmorrhoids, tuberculosis, scrophulosis, in short, in separate chronic diseases of parents, at farthest of grand-parents; beyond this its unskilled eye does not reach back. The same holds good regarding Rademacher's school.

The practiced art of observation in the Homœopathy of the present day reaches farther back, even though it is clad in ideas which permit only *one-half* of the existing to be known; yet here, not only a consciousness of such occurrences exists, but also a Therapeia corresponding thereto, and to this again the famous principle of similarity has led.

To understand a disease, or a cure, is utterly impossible, if one does not know the history of its development. But where is the *historic* knowledge with regard to Pathology and Therapeutics, which possesses the key to these histories of development? No Clinic speaks thereof, the lectures of the professors are silent upon this theme, because no one would know what benefit it would bring to current practice; the text-books on special Pathology and Therapeutics fear to soil themselves with such antiquated stuff. *Held down by the two-headed fanciful image of the contradictio in adjecto of a physiological pathology or a pathological physiology without therapeutics*, this school fritters away its time with experiments, undertaken from curiosity, on all sorts of creatures and dead bodies, and with the easy brooding over them for the sake of picking up some contingent grain, in the hope that thus, at some future time, some new discovery may be promulgated. There exist no inventive maxims for the construction of a therapeutic science *engaging itself in the everlasting flow of progress*, because even the qualities of the outer world are not stable. §. 200. It suffices not to say, look here: This is a cancer cell, this an acarus itch, that a syphilide; no, it must be explained how all this was formerly, and how and why it became so: to-day is so, to-morrow different, and afterwards may be so and so; what means of cure were formerly used, what are now and what will be used to-morrow,—then, moreover, we have, aside from the ætiological, *the other half* of biology, and, as will appear anon, a Therapeia also, resting thereupon. Although the thought of the possibility of such acquisitions for the school of Broussais made their heads crack, instead of enabling them to comprehend it, yet I shall, nevertheless, proceed to show that, in Homœopathy, there exists not only a cultivated theoretical and practical knowledge regarding these subjects, but

that the means are also mentioned by which this knowledge may be enlarged.

§. 291.

It is against the law of an essay to advance the assertion previous to the proof, and this I have heretofore avoided. But now the interest in the most important subjects treated of in this work, tempts me to say that I will prove *that acute diseases run their course, so to say, in the track marked out by the bodily constitutions.*

It is generally and confidently thought that the causes of acute diseases can be discovered with far greater certainty than those of chronic. That, however, is a fallacy from the *non-observation of circumstances*, *i. e.*, one can discover occasional causes, hence one side of the conditions to a disease, the *external*; but the *internal*, the *biological* or constitutional condition, or several of them, where are they to be found? But they *must* be found for a Therapeia based upon natural laws, because, according to these laws, every disease pre-supposes internal conditions, a *disposition* to, or *possibility* of, its development in the organism, and an outer occasional cause, at the same time, as an exciting cause.

Here Homœopathy, according to Hahnemann, distinguishes three biological forms under the designations, rather *indefinite* it is true, of Psora, Sycosis, and Syphilis. But that a *biological* reality must be concealed behind these superficial representations, this is clear from the doctrines of the ætiological school (Rademacher's), with its specific states—*three in number likewise*—from outer causes and the remarkable coincidence of its Therapy, in this regard, with the Homœopathic.

Why then from *two different maxims* should the *same number* of general forms arise, and moreover, in one case, three such forms according to a law of nature as yet unknown to it, which must clearly lie in the outer world; and from the other maxim *again three* specific forms according to historic facts? Are not these decided *complements* to lead the requirements to be made upon a rational Therapeia, set forth in the beginning of the previous paragraph, into new channels?

Who could mistake here the importance and the interest of thorough investigations; and must not every attempt for the establishment of a Therapeia for *acute* diseases utterly *fail without an understanding of those laws*, which, besides controlling in a striking manner *ætiological* facts, harmonizing and completing each other as they do, govern *biological* facts also, as will be shown.

However, the first requisition to enable one to proceed with such inquiries, lies in the abandonment—a preliminary one, at least—of all the convictions learned in the school, or gained for one's self, whether of a skeptical or a dogmatical nature; here nothing but a critique based on natural laws, helps one out of the dilemma.

§. 292.

Since we have heard the ways and means of Rademacher's school, with its *ipsissimis verbis*, the Homœopathic also should, above all others, be heard on the question before us, then history, and finally the critique and practice according to the laws of nature.

Hahnemann, and no one besides him, presented a group of those phenomena which are said to indicate the presence of the *Acarus* poison within the system. Since his time, none of his followers have thought upon the subject any further; they considered the matter as self-evident and established, or denied it altogether. Only Dr. Reuter, Sr., in Nuremberg, declares he has observed, in his practice of many years, stages, so to speak, like those which mark acute diseases, in the various forms of the reciprocal action of this poison with the organism, and he gave me once the following characteristics, as regards the succession of stages in diseases arising therefrom, provided that up to the last stage no medical aid had been sought: 1, Gastroses; 2, Catarrhs; 3, Hæmorrhoids; 4, Sweat of the feet; 5, Hoarseness; 6, Headache and tooth-ache; 7, Diseases of the eyes; 8, Diseases of the ears; 9, Prurigo of the trunk, Furunculosis; 10, Swelling of the cervical glands; 11, Rheumatisms; 12, Swelling of the axillary glands. His experience indicates to him an aggravation of the general *constitutional* status, if, after a disease from among those named under these numbers had passed by, another of a higher number makes its appearance. The whole series, of course, for the most part, refers to adult age, and if, for example, one suffered from chronic inflammation of the eyes, he further concludes that it was highly probable that the chronic ailments from 1 to 7 had been present in previous years. He accordingly shapes his Therapeutics in such a manner as to undertake nothing which could disturb the re-appearance of the previous numbers. In like manner he takes it to be an extension of the *Acarus* disease, if, after that inflammation of the eyes, even though it had been cured, there should subsequently appear diseases of the ears, Prurigo, Rheumatism, or swellings of the cervical or axillary glands.

A physician of extensive practice, even though his practice had lasted but for ten years, will recall some cases in many families, which

would not permit him to reject, without ceremony, these observations, however strange they may seem to the adherents of Rademacher or of the physiological school, at first view.

The gentlemen of these schools know nothing more of the itch than that a mite, the *acarus scabiei*, produces it. But, had they only been practicing physicians twenty-five years ago, at which time cases of itch were to be seen of the severest and most extensive kind, then they would have found that many of these patients not only had those eruptions, but were frequently attacked at the same time with violent fever of acute forms, inflammations of all kinds, etc.; that, after the destruction of all the mites, and the removing by inunction of the copiously discharging eruptions, such diseases rapidly ran a fatal course, or left behind them chronic diseases; that, hence, these violent phenomena, *constantly* following the itch, could not be dependent merely upon the presence of the mites, but upon their specific excretion or excrements taken up by the blood, if, indeed, it may not be assumed, from historic facts, that the *acarus* itself is not always the cause, but rather the result, the final product. But since, for many years past, on account of police regulations, the itch-mite is not only much less often found, but is at once destroyed when its first appearance is observed, and its further reproduction is rendered impossible; since the disease has become harmless on account of the infinitely small number of mites when compared with the billions which formerly used to abide in one human skin; since, moreover, the Physiology, Pathology and Therapeutics of the present day have become a feeble product of *modern times*, and for them the whole history of medicine is written in vain; therefore physicians, in their indescribable short-sightedness, allow themselves to make the most fabulous comments upon the experiences of an Autenrieth, a Hahnemann, etc.

But let ignorance do as it pleases; we are not responsible for its acts or its views.

§. 293.

If those observations of Reuter, communicated to me in conversation, are verified by me, or others, in the course of time, only in a single case, even then their general validity could be declared, upon the ground of abstraction, according to the above cited laws regarding the specific lines of direction of morbid causes and of remedies, their continuing effects, etc., and there would thus be presented a pathological *law of constancy* regarding the stages of the chronic forms of disease in consequence of the, *sit venia verbo*, *Acarus* poisoning.

For the benefit of the adherents of the physiological school even, I cannot refrain from quoting the words of their Coryphæus, Virchow, on page 209 of his Collected Essays, touching this problem of Reuter; these words clearly show, that Virchow even has an indistinct inkling of such a law, although he needs to be set right on many points.

“ In the lymphatic glands the anatomical change, *per-se*, does not commonly take on the character of the inflammatory infiltration, which, as is well known, usually leads to *induration* (formation of connective tissue) or suppuration, although both sometimes appear in the well known leucæmia. But, in place of it, there is found, with such subjects, a very striking tendency to inflammations of the superficial lymphatics and to *furuncular* eruptions upon the skin, just as taking cold is proportionally often assumed as the cause of the *first*, frequently *rhenmatoid*, phenomena. Of course this cause, as every one knows who has anamnestic experience, is a very doubtful one, and, as regards the inflammations of the lymphatics and the furuncular eruptions, it is first to be determined whether they are not rather *the result* of the disease. Meantime one should not forget how long a time has elapsed since he has convinced himself that *scrofulous glandular swellings are occasioned by diseases of the skin, of the mucous membrane, etc., which are frequently transient and overlooked by the patient himself and his friends, and that they subsequently assume that apparently independent character*, by which they make themselves so conspicuous. Even in case of Leucæmia it is surely much more reasonable to admit of such an origin, than to refer it to any primary deterioration of the blood.”

Since I am, moreover, obliged, for the easier comprehension of chronic diseases, to mention those thereof which, according to Hahnemann, contain the productive stage of his Psora, and because Hahnemann simply enumerated them without any grounds of classification, I am induced, by Reuter's observation, to introduce them according to the above-mentioned succession, for it contains, at any rate, a leading principle for further investigation.

Thus, at any time of life, mostly after manifest external causes, which sufficed to produce changes in the motions of the molecules of the organism, in consequence of mental emotions or intellectual or bodily exertions, getting wet, too rapid cooling of the human organism while in a high temperature, there appear:

1. Gastric complaints; either a bitter taste, yellowish coated tongue, or a sour taste, with a white coated tongue, or mucous, pappy taste, with a thick and dirty coated tongue; increased mucous secretion of the throat and the intestinal canal; finally, flatulence with distended

abdomen or with cutting pains in the bowels; at one time hunger, at another loss of appetite; nausea in the morning, sense of emptiness in the stomach; repugnance against cooked food, especially meat or milk; stools now retarded, now diarrhœic, in case of children, with ascarides. All these symptoms may disappear *spontaneously*, or more promptly with artificial help, of which more anon.

2. But now after an indefinite lapse of time, catarrhal complaints follow, obstinate coryza in place of a previously observed impossibility to take cold under whatever exposure, dry and sore nostrils, frequent cough, especially in the morning, sometimes a sensation of constriction of the chest, are all the more apt to occur either because perspiration sets in on the slightest motion, or a sensitiveness to draught has developed itself, sometimes during *spontaneous* subsidence of these symptoms.

3. The children, now become adults, and without having followed a sedentary life, complain of hæmorrhoidal affections, have varicose veins on the lower extremities and at the end of the rectum; discharge of mucus from the rectum; for several days, retarded stool or stools as hard as stones, of masses covered with mucus, in alternation with diarrhœic passages; irregularity of the menses.

Under a not uncommon spontaneous remission of all or of the most of these complaints, there occur sooner or later, but suddenly:

4. Cold hands, moist inside; burning in the palms of the hands and soles of the feet; cold or offensive sweat of the feet; sweat in the morning while in bed; inclination to erysipelatous affections upon various occasions or from various causes.

These ailments also, often disappear of *themselves* in the course of time; but in their place we have:

5. Gradually increasing hoarseness, under the form of inflammations of the throat, even till it becomes stationary, and the physiological physician is consulted; who, if the patient improved, *as he is likely to do in all such cases, surely believed that to his empiricism alone the change is due.*

If he does not pursue an antipsoric treatment, as it is called by Homœopaths, against this condition, then we soon have:

6. Complaints of headaches and toothaches of all kinds, especially half-sided, frequent flushes of heat in the face, not seldom connected with palpitation of the heart and anxiety, with an otherwise pale face; relaxation of the musculature; falling out of the hair; dryness of the same, with abundant formation of dandruff; sweat on the head after falling asleep; nose bleed; restless, frightful dreams.

7. Frequent slight inflammation of the eyes, mostly without any known cause.

8. Pains in the ears, discharges from the ears, hardness of hearing.

9. Itching on the trunk; obstinate chaps of the hands and lower limbs, chilblains even in summer; frequent boils and felons; a dry, rough skin; here and there a desquamating spot on the surface of the skin, which sometimes causes a pleasant itching, and, after being rubbed, a burning.

10. Finally, glandular swellings appear on the neck, and scrophulosis, so called.

11. On the least provocation, various parts of the upper and lower extremities go to sleep; cramps in the calves; painful jerkings of various sets of muscles; strains or sprains from the slightest causes, rheumatic drawing, tension, tearing in the joints of the spinal column and the extremities in damp weather. Renewal of the complaints during rest, at night, in winter, towards spring.

12. Swelling of the axillary glands.

From these precursors, in the parents, or their children, are developed, early in life, or at a later period, as new complaints or with greater intensity, the following diseases which are falsely held by the [physiological] school to be independent affections, while, according to Hahnemann, they are the result of the *acarus* poison either inherited or acquired, viz., scrophulosis, rhachitis, atrophy, marasmus, asthma, consumption, mucous consumption, bronchial consumption, chronic catarrh, difficult dentition, helminthiasis, dyspepsia, abdominal spasms, hypochondria, hysteria, anasarca, ascites, hydrops ovarii, hydrocele, hydrocephalus, amenorrhœa and dysmenorrhœa, hæmorrhage of the uterus, hæmoptysis and other hæmorrhages, leucorrhœa, dysuria, ischuria, enuresis, diabetes, catarrh of the bladder, hæmorrhoids of the bladder, nephralgia and gravel, constriction of the urethra, of the intestines, blind and bleeding hæmorrhoids, fistula in ano, obstructio alvi, chronic diarrhœa, induration of the liver, jaundice, diseases of the heart, spasm of the chest, dropsy of the chest, abortion, sterility, impotence, nymphomania, induration of the testicles, prolapsus uteri, flexions of the uterus; hernia, femoral, inguinal, umbilical; curvature of the spine, chronic inflammation of the eyes, lacrymal fistulæ; near and far-sightedness; day and night blindness; obscuration of the cornea; cataract, amaurosis, glaucoma, deafness, loss of smell and taste, hemicrania, prosopalgia, tinea, crusta lactea, tetters, nettlerash, tumors, goitre, varices, aneurism, erysipelas, sarcoma, caries, cancer, fungus hæmatodes, coxalgia, arthritis nodosa, podagra, apoplexy,

fainting spells, vertigo, paralyzes, anchyloses, tetanus, epilepsy, chorea, melancholy, insanity, idiocy, weakness of the nerves, etc.

As regards the so-called *Sycosis*, as the result of *Blenorrhœa genitalium*, Hahnemann adduces condylomata as symptoms diagnostic of its productive period, and, as the result of their local destruction or treatment with quicksilver, the eruption on other parts of the body, of whitish, spongy, sensitive, flat elevations in the oral cavity, upon the tongue, the gums, the lips; or as large, elevated, brown, dry, knotty formations in the axilla, upon the outside of the neck, the hairy scalp, etc.; or other ailments of the body develop, of which he mentions only the contraction of the tendons of the flexor muscles, especially of the fingers. Here we observe such a striking difference as regards the number of the results between the *acarus* and sycotic poison that it can only be explained by this, that, in Hahnemann's time, the Psora theory was diffused among all physicians, especially by Autenrieth, and that, indeed, to an excessive degree.

Besides, Hahnemann declares that *Sycosis* could cleave to organisms which suffer from *acarus* poison, in which case the Therapeutics must first be directed upon this form.

From the so-called *Syphilis*, under which term he comprises the results of syphilitic ulceration, he would have *Sycosis*, the blennorrhœic form, separated; under this he places the bubo as the substitute of the ulcer, and remarks of the former, that "provided the local ulcer were not cured by external means, and no complication existed, *there could be no chronic disease more curable and more easily cured than this; but, complicated with the effects of the acarus poison, it is impossible to cure this disease with anti-syphilitics alone.*" This two-fold monster characterizes itself by *stitching painful* swelling of the tonsils; by the round, copper colored spots shining through the epidermis, by the *not-itching* pustular eruption on the face upon a bluish reddish base, the painless *sores* on the hairy scalp, pale, smooth, clear, merely covered with mucus, almost *level* with the sound skin, the nightly boring pains of exostoses, etc.

These, hence, are the three animal substances which can reproduce themselves, even at the present time, under the requisite conditions, and the motions of which lead to changes of nutrition of such intense specification of forms, that they may be handed down from parents to children, and children's children.

If we consult older as well as more recent medical philosophers, important explanations, improvements and completions of Hahnemann's schemata regarding psora, sycosis and syphilis may be gathered. These schemata form too much of a chaos, they lack that precision of form which would enable one to infer the law underlying them. But that here the phenomena are controlled by *a natural course of events, from given elements*, admits of no doubt; at least my suppositions have been daily confirmed for the last twenty-three years, deductively and brilliantly, by the Therapeutics drawn therefrom inductively, as examples will show, and as every one conducting his treatment in accordance thereto can observe for himself.

Pursuing this theme, I am obliged again to appeal to the demands of the first paragraph, and especially to beg young physicians to forget the dogmatism of Ricord, which never brought forth any Therapeutics which would stand the test, but only one which is detrimental in the highest degree, although he, even to-day,¹ bears the banner of the majority.

In Germany, at least, it is as yet very little known that the celebrated Ricord, at the close of his clinical activity, recanted his doctrine of Syphilis, which controls all the medical Faculties, (*Leçons sur le chancre par Dr. Ricord, Fournier, Paris, 1860*). In the most flagrant contradiction to his doctrines, which, upon his *authority*, have been held as impregnable during an entire generation, and are still held as such in physiological medicine, he had all at once learned that there were two chancres, entirely differing from each other from their very origin, and not merely one.

To Ricord, certainly the type of a Professor, it happened as it has to all who began as young physicians to entertain doubts as to their Therapeutics at the bed-side. But, instead of resolving their doubts in a manner conformable to natural laws, they undertake new voyages of discovery with this or that experiment, and build thereupon new false theories, in order to make people talk of them, and finally to declare them false again. Consequently even Ricord's own theory is seen through and destroyed by his very own self.

What will the Professors say to this repentant confession, and how will they answer for it, that they have accepted such doctrines without rational examination, have diffused such errors, and clung and still cling to them in spite of the experiments of Homœopathy to the contrary, experiments confirmed by long years of practice, thus delivering

millions, by the mal-treatment of diseases of their genital organs, to a miserable existence or to death.

If faith without knowledge, if authority without law and rule, have ever been the greatest scourge of humanity, History furnishes examples in abundance of the fact, but none so humiliating of the contagious aberration of the human intellect. But few Professors entertained modest doubts about Ricord's theory, yet no one knew that experiment is only the father of discoveries, if mathematical speculative philosophy, the mother of discoveries, does not stand at its side. Such calamitous errors, after Hahnemann at least, should never have broken upon suffering humanity!

So long as teachers are engaged for a mere empiricism, for the doctrines of the physiological school, each one has to submit himself anew to the same Sisylphus-toil as happened to Ricord, at the beginning of his career, for all begin with new attempts at discoveries.

It is true that in the Compendium of the doctrine of Syphilis, by Dr. A. C. F. Michaelis, of 1865, it is stated, and hence was admitted in Germany, that, besides the Chancre poison, a second, the blennorrhœa poison may develop itself within the genital sphere; yet the experiences of this gentleman do not go so far as to have taught him a gonorrhœa as well as a chancre dyscrasia; hence he throws the diseases of both dyscrasie, with the chancre dyscrasia, in the same heap, on which account the Therapy for these chronic diseases could find no enrichment or elucidation.

No less must I beg the Homœopathists for the present, at least, to give up *part* of the Hahnemannian dogma regarding Psora, Syphilis and Sycosis, and must examine both parts of Rademacher's three specific conditions. If these are diseases said to be handed down from parents and grand-parents, they can be propagated only in the primitive constituents of the cell and of the connective tissue. We should, hence, in Rademacher's sense, direct our first attention *to the blood, the means of transportation for the other cells, and itself most rich in cells; but at the same time, also, to the connective tissue, as being the general frame-work of the cells.*

§. 295.

I shall dispose, in the most comprehensible and shortest manner, of the most difficult of all physiological, pathological, and therapeutical subjects, *i. e.*, difficult in relation to the prevailing assumptions of all schools, at the present day, and yet without difficulty, if led by the protecting hand of a criticism according to natural law, *if I select*

for investigation one of the most conspicuous examples, of modern times, belonging to this subject; an example, which, for many years, comprises the greatest *pathological* discovery of the physiological school—I mean the discovery of *Leucæmia*, everywhere recognized as *new*, by which Virchow is said to have gained, within his party-circle, imperishable laurels for himself. He will pardon it, if we can not call his discovery a physiologico-pathological one, for he declares, “*Leucæmia* is not a purely anatomical, but also an *essentially* pathological idea; thereby we express not merely the simple fact of the increase of the colorless corpuscles of the blood, but, at the same time, the lack of the red corpuscles, or, as I have emphasized from the first, *the changed tissue-formation of the blood in its dependence upon certain organs.*”

The question comes up now, what morbid states are known to *the history of medicine* as preceding those which are understood as lymphatic and those understood as splenic leucæmia. For, so much is certain, that according to this indistinct meaning of its definition, even this disease cannot now, for the first time, have fallen as a thunderbolt from a clear sky, and that it even could not have waited for some *Physiologist* of the present time, in order that it might be discovered by him.

Hence, in order to recognize it again in the history of medicine, we must first group together those observations which the *present time* knew how to find regarding this form of disease.

Its present characteristic, according to the article “*Leucæmia*,” in the Collected Essays of Virchow, consists in “*white blood*,” “with a simultaneous lack of the red,” though the latter addition might be self-evident.

“Digestion and pregnancy regularly produce *the same* (?) condition.”

Considered apart from these transitory states, the pathological increase of the colorless corpuscles does not present a specific [einhheitliche] morbid group. “That, which I (Virchow) have called *Leucæmia*, is essentially different from the *inflammatory*, the *typhus*, the *septic* polyleukocythæmia, just as *chlorosis* is distinct from the *anæmia* of *cancerous patients*, or of the *hæmorrhagic*.”

Now, in opposition to this, I would like to ask, at once, whether the chlorotic, the cancerous and hæmorrhagic patients do not likewise suffer from leucæmia, or, whether the typhus, the septic, the inflammatory forms are not leucæmic also? since, certainly, in case of them all, white blood is wont to present itself in excess; and if not, then *white blood is no characteristic at all* for that form of disease,

which Virchow thinks he has discovered, and *not at all a specific token belonging to it alone*. The general character of those leucæmiæ must hence necessarily lie *in something else*, as he himself seems to acknowledge, according to the tenor of §. 293, proving thereby that his anamnestic experiences are not very comprehensive.

On page 197, he says, for instance: "If one makes a *finer* examination of leucæmic blood (what does this mean—finer examination? G.), then it appears that it is not quite the same in all cases, and just this very want of concordance is of great significance for the *pathological* as well as for the *physiological* comprehension of the changes. First, it appeared as if all cases were homogeneous. But, as early as 1847, I made the first observation to the contrary. While all other cases showed the connection of the change of blood with *tumors of the spleen*, there appeared here a very unusual, and, in fact, *hitherto quite unknown, kind of tumor of the lymphatic glands*, and the blood, which, in all previous observations, had been full of distinct and well developed cells, here presented colorless formations, partly nuclear, partly cellular, which only differed from the elements found in the lymphatic glands, by this, that in a given number there were more real cells present."

"Subsequently a new case of this kind came up for investigation, where the blood contained innumerable round granulated nuclei, usually provided with a nuclear corpuscle, and of the size of the ordinary nuclei of the lymphatic glands; here and there cells, also, which contained such a nucleus in a relatively closely lying membrane."

"Bennet also saw something similar, *only his case was less sure, since he had to do with a cancer*." (? ! G.)

"I have hence felt constrained to discriminate two different forms of Leucæmia, a *lymphatic* and a *splenic*, of which the former brings elements into the blood which are analogous to the constituents of the splenic pulp, the second, such as are analogous to the parenchymatous nuclei of the lymphatic glands."

The compositor seems to have taken the "first" for the "second" here, and to have confounded them, for

"The more extensive the diseases of the *lymphatic glands* are, the more abundant are the lymphatic elements in the blood, and even the *contemporaneous affection of the spleen* does not suffice in these cases to wipe out the peculiar character which the dyscrasia of the blood acquires from the lymphatic glands. Conversely, again, we see, with *marked affections of the spleen, hypertrophies at the same time, especially of the neighboring lymphatic glands*, yet here, the splenic character predominates, since, thus far, at least, lymphatic elements

have not been found under such relations, which, however, may yet be found by paying closer attention to admixtures, probably, more unusual."

"The recognition of this lymphatic form, is of the greatest importance for the comprehension of this disease, because it demonstrates *the dependence* of the dyscrasia upon the affections of the *particular organs*. But for the *physiology* of the blood, we gain also thereby an extremely important *experience*, so that I was enabled to publish my first communication with the remark, that the *importance* of the spleen and the lymphatic glands for hæmatosis, which has so often been hypothetically declared, is thereby *positively confirmed*. For *what else could these observations signify*, than that the change of the blood which, at one time carries splenic, and at another lymphatic elements, proceeds from the change in the spleen and the lymphatic glands, which is always connected therewith?"

The author comes now, upon the basis of two cases, to the conclusion that "it is certain that as regards the splenic, as well as the lymphatic, form of leucæmia, the changes of the spleen and the lymphatic glands *could exist before the dyscrasia, that they might continue for months and years before the change of the blood would take place, and that the particular kind of the latter is dependent upon the nature of the previous organic disease.*"

"One of these cases was that furnished by Bennet, of a man twenty years old, with *swelling of the liver and spleen*, which had existed over four years, and in which, at the time of his reception into the hospital, *no morphological deviation was found in the blood*, and the quantity of colorless corpuscles increased only little by little. The other case, observed by the author himself, was that of a man fifty-one years old, who, in 1852, was taken into the hospital on account of *enormous swellings of the cervical, jugular, axillary and inguinal glands; without any known cause, a small tumor had developed itself, three years before, under the left arm, which grew slowly; a year ago another appeared upon the neck; finally, several smaller ones on both sides of the lower jaw*. When brought to the hospital, the tumors had formed masses of the size of the fist, of a tolerably soft and *relaxed* character; they were *painless*, and *the skin over them was unchanged*. *The microscopical examination of the blood presented, at first, no change*. The remedies used externally and internally were inefficient. In the winter of 1853-4 the increase of the swelling and the distension of the *cervical and axillary* region had attained such a degree, that he was very much incommoded thereby. The circumference of the neck was, at that time, 20 centimetres, that of the chest

50 centimetres. The examination of the blood now presented a very considerable increase of colorless blood-corpuscles, and especially of the *lymphatic* form. The patient died in the summer of 1854, after the swelling under the right arm had broken, and a pint of *clear, yellowish fluid* had been discharged."

"On the other hand," the author continues, "it cannot be denied that the magnitude of the organic disease *does not stand in a constant relation* to the full development of the dyscrasia. *For there are very considerable tumors of the spleen and of the lymphatic glands without leucæmia, and this latter again is sometimes far advanced where the local changes have made but very little progress.*" Example.

"A girl of three and a half years, who had previously suffered from *Rachitis*, and subsequently from *Broncho-pneumonia*, died with symptoms of *eclampsia without having had diarrhæa*. The microscope showed, in both ventricles of the heart, an immense number of colorless bodies, among which the small *lymphatic* form was predominant. The spleen was but little changed. The stomach and pancreas were also normal, but, on the contrary, the liver was quite fatty and the *mesenteric glands* of the ileum and jejunum were enlarged to the size of *hazel nuts*, hard, dense, *whitish gray*, on being cut, and saturated with a serous fluid. *Peyer's glands* were to be seen as red swellings. In the canal of the small intestine there was an abundant *catarrhal* fluid. The *solitary glands* everywhere stood forth very large and *pearl-like*. A few oxyures. Besides a chronic *broncho-pneumonia* on both sides, a slight *catarrh of the kidneys*; rachitic bones in the stage of re-formation."

It was again new "that the intestinal follicles even may *actually* show the very same change in leucæmia which we most frequently find in the external lymphatic glands."

After the remark that the *watery* constituents of the entire blood are *increased* in leucæmia, and the solid, especially the red corpuscles, are diminished, Virchow proceeds: "From *inflammatory* blood, the leucæmic is mostly distinguished by its normal percentage of fibrine, from the *hydræmic* by the normal composition of its serum."

In the *leucæmic blood of a patient afflicted with disease of the spleen*, both *lime* and *hypoxanthine* were found. Since, now, aside from the morphological constituents, even these characteristic chemical bodies were found, as *products of the spleen*, in the blood, the author thinks that the old doctrine of disease of the spleen has gained thereby a firm basis.

"Here is the place to mention, that, in quite a similar manner, although much more rarely, *melanæmia* makes its appearance, as

well as leucæmia, which former pretty clearly shows its splenic origin. The first observation of this kind was made by Henry Merkel, upon an *insane female*; the second was observed by me on a man who had for a long time suffered from *intermittent fever and a splenic tumor*. In my case there were really cells found in the blood, surrounded with *black* nuclei, corresponding entirely with similar ones found in the spleen and liver."

"If we return now to pure leucæmia, we must, first of all, extend our investigation, as regards its *origin*, to the hæmatopoietic organs. Here we can say, moreover, with tolerable precision, *in what this disease consists*. Regarding the spleen, as well as the lymphatic glands, the question concerns a numerical hypertrophy, or, as I have proposed to say in place thereof, a *hyperplasia* of their constituent parts, and, indeed, first of the glandular cells, (glandular nuclei; parenchymatous nuclei). Subsequently, an increased *formation of connective tissue*, and, especially in the spleen, the development of *hæmorrhagic infarctions* may be added thereto, which, in their re-formations and transformations, lead to colored, wedge-shaped pseudo-growths and cicatrices. In this case we may attribute to the process an *inflammatory* character as clinical observation shows, while usually, it must be admitted, that no *foundation* is given for the supposition of an *actual inflammation*."

"The swelling of the lymphatic glands usually develops itself *slowly*, but at intervals, without any especial disturbance being observable in the parts from which they receive their lymphatic vessels. *Sooner or later acute attacks* occur, under which the swelling rapidly increases. In Schreiber's very remarkable case, this aggravation, at intervals, was especially remarkable. The patient, eighteen years of age, heretofore always healthy and regularly menstruating, and previously never *chlorotic*, after her menses had once been uncommonly *profuse and long-continuing*, experienced the most manifold ailments, especially *vertigo, vomiting, buzzing in the ears, palpitations, disturbances of respiration and digestion and weariness*; she had become very pale, and while the highest degree of debility developed itself, together with hyperæsthesia of the face and convulsions, she had occasionally experienced pains in the *right hypochondrium*. Then followed fever, petechiæ, *stomacace, stomatorrhagia*, slight *œdema*. The treatment, which mainly consisted of *Quinine with acids*, produced a very *marked* improvement, till, at *another menstrual period*, a more violent attack took place. On the last days of the menses, there began, with a sense of tension, a swelling of the *cervical glands*, soon followed by that of the *axillary and inguinal glands, as well as of*

the spleen. The fever, the *petechiæ*, the *debility* returned again, and now death followed, within a short time, without any possibility of preventing it."

The following is also worthy of note:

"With the typhus affection of the intestinal follicles, the change also agrees in this, *that it does not always keep within the limits of the old glands, but extends itself in such quantities that one finds glandular parenchyma where otherwise there is nothing at all of a gland to be seen.*" "I was, at that time, all the more surprised at this state of things, since other writers have never made any mention of it, though I have subsequently seen the same thing almost as completely, especially in the case of the man fifty-one years of age, already mentioned, as well as in a later case, that of a veterinary surgeon, with whom, not only the spleen, but also the *bronchial, axillary, jugular, sub-maxillary* and *mesenteric* glands were most extensively swollen. This was also the only case *where I have seen suppuration in single glands*; in the case of the above-mentioned man, however, something similar must have occurred, *since the axillary swelling had finally broken outwardly.*"

"Things are much more complicated with regard to the spleen."

"Here, also, we meet with an entirely *chronic insidious* course, the first stages of which often *run back for many years* and *elude inquiry*, or we find, rather, an *intermittent* course, in which every recrudescence is joined with pain, and often with fever. One of the patients described by me, experienced, four years before his reception into the hospital, *in consequence of a severe cold*, as he thought, stitches in the left side of the abdomen, and got *diarrhœa, with pains in the bowels*. These phenomena *disappeared and returned, from time to time*. For the last nine months they have been more continuous, and two months ago he observed, for the first time, a *swelling of the spleen*, which gradually increased. In the hospital his condition, at first, *essentially* improved; the tumor of the spleen decreased, and the patient left the institution. He soon, however, returned with fever, exacerbating *every evening*, the tumor enlarged again, and for quite a while, was every morning from half an inch to an inch larger in every diameter than in the evening. Gradually the patient sunk away entirely, and death occurred with symptoms of colliquation."

"It may be proper to mention here, a point to which I have for a long time directed my attention, that, with just such patients, large quantities of *uric acid and urates* were excreted with the urine."

After having spoken still further of the participation of the liver and kidneys, the author expresses himself thereupon as follows:

"Hence we must conclude to consider the disease as a peculiar disease, *sui generis*," and adds the following clinical case:

"A woman, thirty years of age, consulted the author on the 21st of May, 1854, on account of a swelling of the abdomen, which had been taken for an *ovarian tumor*. She had *never suffered from fever and ague*. Confined two years before, she nursed her child for a year. After this, her menses did not return. She complained of heaviness of the abdomen, swelling of the extremities, *scarcely any of pain*. There was so great *dyspnœa* that she could hardly go up stairs, and was even wearied by talking. She was frequently troubled with *nose-bleed*, and often had *bloody expectoration*. The appetite was poor; she had watery, but never bloody diarrhœa; the tongue was clean, and of a light red color; the skin of a dirty, somewhat icteric hue, *dry* and emaciated; the cutaneous veins were *very much enlarged*; the pulse tolerably large, full and frequent; the abdomen was distended, hard; in the lower part slightly fluctuating; the intestinal sound perceptible only over a small portion. On the other hand, in the left side, the *spleen was very distinctly felt as hard as a board*, reaching to the umbilicus and the fossa iliaca; no sensitiveness on pressure. In the region of the liver also great resistance was found, and a dull sound over a great extent. Blood from the point of the finger contained very few red corpuscles; on the contrary, countless colorless ones of all possible sizes. There was also a number, by no means small, of shining nuclei, such as are wont to present themselves in hyperplastic *lymphatic glands*.

I ordered a strengthening diet (wine, eggs, beef-tea); internally the *Iodide of Iron*; externally, inunctions upon the abdomen with a salve composed of Ol. Terebinth. et olivar.; aa. 3 iss. Tinct. Iodii et Ol. juniperi æth., aa. 3 ij; foot-baths with potash. On the 5th of May, however, a messenger came to inform me that the patient, for the last twenty-four hours, had suffered from nose bleed that could not be stopped, and before I could give any direction even, the patient was dead. The autopsy, which I could not attend, revealed the presence of an enlarged spleen."

Furthermore, we have, in the same article, page 293: "In the case of Rineker, the disease in a woman, 34 years old, began after a *cold bath*, with febrile symptoms and swelling of the *cervical glands*, which quite rapidly attained a considerable size, and subsequently, also, the further affection of the *inguinal and axillary glands* took place, with fever, the larger glandular masses feeling hot and painful."

"Vogel, 34 years old, two years before his death, in the midst of febrile symptoms (*weariness, lassitude without chills*), was taken

quite suddenly with a swelling upon the neck, on the disappearance of which the abdomen began to swell, though the swelling of the neck returned soon afterwards, and then suppurated.

In Virchow's Archiv, Bd. I., there is the anatomical description of the cadaver of a very powerfully formed man. For nearly *two* years he had had an enlargement of the glands on both sides of the neck, painless, but uninterruptedly and gradually increasing. large bunches of an uneven, knobby surface, painless, very soft, but not fluctuating, presenting to the touch the inelastic feel of lipoma, extending to the angle of the lower jaw, into the axillæ and the inguinal regions. At the same time there occurred frequent attacks of oppression of the chest, amounting to the extremest difficulty of respiration; especially at night he had to cough much, the expectoration being detached with great difficulty. Gradually the abdomen swelled; fecal evacuations were difficult to obtain, although mucus-like masses were passed incessantly; the patient felt much depressed thereby, and very languid. Even in the cavity of the abdomen it was thought that enlarged glands could be felt. Respiration very frequent; in the right lower lobe, bronchial respiration extensively diffused; on the left side unequally diffused mucous râle, in the central portion of the lung; Iodide of Iron was prescribed; but on account of the increase of dyspnœa it had to be laid aside at once. The autopsy revealed that these enlargements of the glands to a greater or less degree were extended over the whole lymphatic glandular system. In the inguinal glands, especially, there was not only a hypertrophy of the real peripheral glandular substance, but, also of the connective tissue penetrating the interior of the same, which gave them a decided kidney-like appearance. Microscopic examination presented the normal glandular elements, etc. The ductus thoracicus was, at its entrance into the thoracic cavity, entirely embedded, quite up to its orifice, in glandular parenchyma; the spleen presented no deviations from its normal proportion.

In his Collected Essays, the author continues, page 203, upon the structure of these glands, as follows: "Upon a section we discern the much enlarged, peculiar glandular cortex which, in many places, is from a half to three-quarters of an inch thick, and likewise the somewhat extensive cavernous connective tissue. In the cortex, one can hardly recognize the normal partition of the separate follicles: it no longer has a homogeneous appearance, but looks gray or reddish-white, almost pulpy; it is very tender and breaks down easily and discharges under pressure, upon the cut surface, a turbid watery fluid, while, with the scalpel a more pulpy substance can be scraped off."

Just here I must quote the following from the article on "the colorless blood-corpuscles," page 217, where the loss of color of the chyle and of the pulp of the spleen exposed to the air, is spoken of "In this connection I will especially remark the fact, that the lymphatic glands also, which normally have a very slight yellowish gray or yellowish white color, undergo, exposed to the air, a decided change of color, which can be seen very beautifully in the hypertrophied lymphatic glands, extirpated from the living body. These, exposed to the air, gradually assume a very decided *brownish yellow* color. Moreover, it is well known, that hardly any other than the lymphatic glands of the respiratory apparatus, get, at first, brown, then black, while, pathologically, the epigastric, more seldom the mesenteric, the lumbar, the inguinal glands, *take on* the same *black* or slate color."

§. 296.

Thus much from Virchow relative to his Leucæmia and what belongs thereto.

Now the problem arises to ascertain whether the disease-forms, as they appear to Virchow, before and during the presence of a leucæmic blood, really constitute a new discovery of this physiologist, or whether this leucæmia is not rather a partial symptom of *pathological forms already long known, accompanying, though not constituting, these forms*, a symptom to which quite another character belongs; so that the assertion that Leucæmia is a disease *sui generis* must be either defended or given up.

In this connection I must again mention that we understand nothing, least of all, a morbid process, if its development has remained unknown to us; therefore, also, we cannot rely upon the assertions of Virchow touching this point, since they are only fruits of the present. And if, for example, Prof. Virchow says above, that Bennet's case was less pure, since cancer was present in this instance, then I would like to ask, upon what ground such an assertion could be made, since the good Professor could not fully enlighten us even as to what he understands by cancer. Thus, these assertions of the Professor do not seem to be ripe fruits by any means.

In order now, to give this leucæmia the place which belongs to it in Pathology, I must adduce cases which likewise have appeared new to Virchow, and which he enrolls under the titles, Fibrin, White blood, Thrombosis. Embolia, etc.

In his article upon the decomposition of fibrin, there are two cases which are remarkable, especially that which has reference to a large ulcer *in the middle of the leg*, "habitually putrid."

In the article on "White blood," there appears a female cook, fifty years old. According to her assertion, she had, for more than a year before, *a considerable swelling of the lower extremities*, and soon also of the abdomen, violent cough, with copious *mucoous* expectoration and pains in the abdomen. During the following summer the cough had relaxed, but in the fall returned with extremely violent diarrhœa. The latter afterwards subsided again, while the cough increased *anæst.*, without, however, being connected with *any troubles of the chest*. In the last eight days, copious diarrhœa had again set in, partially *bloody*, etc. After repeated violent attacks of nose-bleed, her condition became more satisfactory, only *furuncular eruptions* presented themselves *upon the nose, and between the thumb and index finger of the right hand*. Repeated and violent epistaxis, which continued till the eighth day, subsequently redness and painful swelling of the skin, in many places, *of the volar surface of both hands, on which vesicles were soon formed containing at first a clear, and subsequently a purulent fluid*. On autopsy, the heart, somewhat hypertrophied, was crowded full with large, loosely lying, *greenish white* coagula, the spleen being *enormously hypertrophied*, etc.

From the Vienna General Hospital, a case is communicated as "general pyæmia," which I must also relate here for the sake of the following. The autopsy presented as follows: "The entire integuments of the *abdomen*, the *back*, and the posterior surface of both *thighs*, were beset with superficial abscesses filled with *greenish pus*, varying in size from that of a pea to that of a dime. In the most of the pulmonary capillaries, large as well as small, there were *greenish-yellow, tough* coagula of blood: in the posterior-inferior part of the right lower lobe, two hepatized spots of the *size of walnuts*. In the cavity of the heart and great vessels, there was a *greenish-yellow* fibrinous clot. *The liver* was enlarged *threefold*. *The lymphatic glands* about the pancreas were swollen to the *size of a dove's egg*, of a *light red* color, infiltrated with a viscons *greenish-yellow* purulent fluid."

In the second article upon the plugging up of the pulmonary artery, there are also two cases, which must be enumerated here, as will be seen forthwith.

A man fifty-five years old, was treated for a *stricture of the urethra*; his general state of health was very good, and there was no complaint at all of any affection of the chest. One afternoon when he *apparently felt very well*, he fell out of the bed and died in less than two

minutes. On a minute examination, nothing was found but *an obstruction of almost all the larger branches of the pulmonary artery* by old and variously discolored coagula of blood; the kidneys were slightly granulated.

The second case, page 273, relates to an old woman of sixty-five years, in whose forty-fourth year, a firm, very hard, but *painless*, swelling had formed in her right breast after a severe blow; this swelling gradually increased, and at times was the seat of acute shooting or stitching pains. Near to this, a second induration was formed, which finally broke, and now painful swellings were formed in the *axilla* also. *Bloody diarrhœa* followed, etc. *Autopsy.*—*Under the chin* a quantity of small, flat, apparently solid *cutaneous tumors of the size of a large lentil*. *Cancer of the breast*, from the ulcer of which a knotty cord, *consisting as it seemed of degenerated lymphatic glands*, extended to the neighborhood of the orifice of the ductus thoracicus. The separate tumors were of the size of a hemp seed and from that up to a large walnut. In the pulmonary arteries, *plugs in all stages*.

The walls of the uterine cavity were studded with separate superficial polypous growths.

A *cancerous ulcer* of the breast is thus described: The hard, roundish edges on the outside, sinking down quite flat, on the inside torn, and raised up, had a *knobby, ragged basis*; the whole was of a *blackish* or *grayish* color, here and there running into a blue, and covered with a thin, discolored, partly *dry secretion*. A section showed the edges of the ulcer to be formed in great part of a *transparent*, pale white tissue, tending to blue or reddish, like firm *spinal marrow*.

The colorless blood corpuscles, the author says, page 183, have a prominent peculiarity pointed out already by Nasse, to wit: a *very great viscosity*, by reason of which they not only become readily agglutinated to each other, but also *adhere very firmly* to other objects, to wit: to the glass plate under the microscope. The plugs also, page 225, adhere to one wall of the vessel which beneath them presents no other change than generally appears from the shrinking of the plugs and the formation of thrombi. The author here leaves the whole question of the causes of the coagulation of these plugs untouched. "Whether the coagulation occurs from inflammation, or, as the saying is, spontaneously, whether, therefore, a primary or secondary phlebitis is present, *is to me quite a matter of indifference*; I have to do merely with the coagulation alone." *That may be called making one's task very easy*. There is, however, in these given cases, no other cause conceivable than this very same viscosity, arising from a definite blood

crasis, though it does not yet distinctly manifest itself, by reason of the excess of colorless blood-discs, to the naked eye. According to Emmert, the colorless blood-corpuscles at any rate, more abundantly accumulate in the blood of the stasis, and that this condition must precede the formation of a plug, no one can doubt. Moreover, such plugs actually occur in cases of leucæmia, detailed by Virchow, as on page 159, Vol. 3.

There are still many other cases of leucæmia which might be adduced, and which might completely exhaust the theme in hand; the case with *acute bronchitis and the paste-like blood*, page 179; that with a *leprous ulcer* on the leg, page 95; with *nodulous swellings* on the diaphragm, page 160; with *going to sleep of the limbs*, page 175; *sclerema*, page 112, etc., but the foregoing may suffice.

§. 297.

Since we can never attain our end in scientific investigations with perceptive reasons [*rationes cognoscendi*] alone, so, it is quite a matter of indifference, how such processes are now designated, or, how it was thought best to designate them heretofore. Hence, as regards the fathoming of facts, we ought not to take offence at the explanation or designation accidentally given them, and should prefer rather to let them stand upon their own merit, as transient modes of perception, but the facts are so much the more to be kept in view. Virchow would have many of these pathological processes arranged under the notions of his lymphatic and splenic leucæmia, but others not; but I shall now have to show, that all these processes are not new, as Virchow flatters himself, but are *the same* which have hitherto been grouped under the head of *Sycosis*.

If we compare the facts of the forms of appearance, we find quite the same statements from the earlier physicians, except the co-called leucæmia, as they did not know the use of the microscope for such investigations.

They say, that sycosis, truly enough, appears under various combinations of forms peculiar to it, yet that these forms are always the following: now appearing one by one, now in simple, now in complex combination, exactly in the same manner as the examples just quoted have brought it to view, only with the difference, that Virchow places the *cause* in the excess of colorless blood-corpuscles. In this, however, he has omitted to explain what might be the cause of this over-plus of the colorless blood-corpuscles, which, by the way, are only visible in the last stages of this disease, or, as grumous blood, are

designated by the word lymph. The earlier physicians, on the contrary, sought that cause in the sycotic poison, and which of these two sides is right must be determined from facts, which were at the disposal of neither of those parties.

It is not very long since Autenrieth and Hahnemann lived. The former treats upon this disease in an excellent manner. He says: "these *sycotic glandular formations appear even in places where no glands at all are to be found*. Hence a degeneration of the glands cannot make up the essence of this form of diseases. *Scrofulous glandular swellings*, however, always have their seat in the glands originally present." In §. 295, page 241, we have just now read that Virchow was all the more surprised at this condition, since other writers had never made any mention of it. Can it be that Virchow really did not know an Autenrieth?! or, if he did, would he, notwithstanding, indulge in such assertions? I also remind my readers that the prescription of Iodine, or Iodide of Iron, was followed with like bad results in Virchow's hands. These substances could only be given as remedies under the supposition that these sycotic forms also were to be treated like the scrofulous.

Even Morgagni had likewise found these nodulous formations in the *mesentery* and in the *inguinal glands*, standing in connection with *sycosis*; even he knew the *yellowish, clear* fluid of their contents, and that they passed over into *indolent suppuration*. These physicians, and their predecessors, well knew that these glandular formations appeared under the most various forms, because the organic part in which they originated, *now the mucons membrane of the intestinal canal, now the bronchi, now the cellular tissue*, etc., *must exert influence upon the form and contents thereof*. They knew these formations from the size of the *head of a pin* to *enormous dimensions*, spreading themselves as *painless indolent tumors*, while the syphilitic glandular swellings, especially of the inguinal glands, are of an inflammatory and painful nature. They saw these knotty formations in almost all parts of the body, the muscular system excepted, in the *omentum, the mesentery, the intestines, in the substance of the kidneys*, in the testicles, the ovaries, the *liver*, the *spleen*, the *diaphragm*, the *lungs*, on the *pleura*, in the *substance of the heart*, upon the *meninges* of the brain, on the *nerves* and under the *epidermis*. They knew that these swellings generally came *first on the neck* or in the axilla, and as Virchow also declares, that *catching cold, passion, or a single mechanical influence*, for example, a strain of the muscles, or a blow upon the back, may cause their development, and much more readily any disturbance of function, as that of menstruation, etc.

Should not that also remind us of §. 152, page 260, Part I.

These forms, they say, are surrounded by a *fibrous thick membrane of their own*, and neither as regards color, contents or consistence, do they always present the same quality; they resemble quite often the *scirrhus of the female breast*; now they contain *ichor* and now *yellow serum*; now they are *hard*, now *pappy*; now they discharge a *creamy fluid*, and the nodule, when pressed out, is a tissue of loose, fibrous substance; now their interior looks like the *cortical substance of the brain*, of a translucent appearance; at another time they contain a *greenish*, purulent, or *brownish* mass.

But because these physicians noticed that these swellings *often disappear spontaneously*, and *other diseases appear in their place*, they hence *counted* them as the results of the *same cause*, and because they saw these results regularly preceded by various other phenomena, they recognized them also as precursors. To gain the true significance of all these morbid phenomena, they were compelled, by reason of their numerous observations, to assume an hereditary cause, or one from sexual intercourse.

In connection with these glandular swellings, which, to the older physicians, passed for *complete sycosis*, they observed none the less that, in their *train*, enlargements of the *liver* and *spleen* also followed.

As *precursors*, however, they reckoned chiefly, *dislike for all labor*; *incomprehensible melancholic mood*; *catarrhal* affections, which may occur in all the mucous membranes, without distinction, chiefly in damp weather and towards *spring*. A number of diseases, arranged by Physiological medicine under the form of tubercular, phthisis laryngea and trachealis, are such precursors; they are curable under proper treatment; but, under the methods of physiological medicine, they lead inevitably to death. These cases distinguish themselves diagnostically *by this*, that, in these laryngeal and tracheal forms, complaints of burning in these parts are not heard as in the tubercular, and the patient's only complain of a constricting sensation, which is *not* increased by pressure upon the larynx. Even at first this form is characterized by uninterrupted *hoarseness*. The frequent *swallowing* of these patients, early gives a hint touching the quality of the disease in hand, and regarding that which is to come. At the same time, the patients think that the passage of the air is hindered, as it were, by a *foreign body*. This hoarseness increases incessantly, the respiration becomes constantly more laborious, and the cough harsh, whistling and barking. With all this, the patients *look well* and *no trace of fever* is to be seen in them, which, indeed, one might well expect, from the very annoying excessive *lassitude*; a lassitude which,

subsequently, hardly allows them to walk. Nevertheless, there is danger in delay, on account of the sudden death, which is quite possible, from suffocation. To these so-called sycotic forms, *œdema glottidis* also belongs. While *œdema* of the glottis frequently occurs only as a swelling, the hoarseness and difficulty of breathing arise partly from *ulceration*, the diagnosis of which will be shortly given, partly from those *knotty* formations upon the mucous membrane of the trachea, especially upon its glands, or, from a change of the *vagus* or *sympathicus*, which are found to be surrounded with *hard gland-like swellings, as if by a string of pearls.*"

The *sycotic asthma*, in consequence of changes which have taken place in the pulmonary tissue, is distinguished from other asthmatic forms *by this*, that it also, according to subjective feeling, has its seat in the breast, and not, as otherwise, in the larynx; furthermore, that it occurs *paroxysmally* and *intermittently*; and not unfrequently during *swelling of the external glands*, it disappears spontaneously, without leaving a trace. It may also arise in consequence of swellings of the glands at the bifurcation of the trachea, and may be suddenly excited by going up stairs, muscular motion or mental emotion.

Besides these, according to external appearance, rather catarrhal precursors, there are also *exanthems* and *ulcerations*.

The exanthem possesses various forms; at one time it merely consists of single white desquamating spots; at another, itching pustules, rising up within a light-red circular spot, containing a *bright yellow* fluid, which, when emptied, form dark brown crusts, readily falling off; or at first, dry, hard tubercles of a *reddish blue* color. The first are grouped together on the edge of the hairy scalp, on the *breast*, the *back*, the *thighs*. The latter occupy the same places, though they are chiefly to be found upon the *knee* and the *back of the hand*; sometimes in the corners of the mouth and on the lower lip. They either develop into *ulcers* or their discharged fluid *forms a dark brown and cracked crust*, and extensive *rhagades* are formed. Or there are formed in the *cavity of the mouth*, on the *tongue*, the *inside of the cheeks*, on the *lips* light gray, hardly elevated plaques, generally but little sensitive; sometimes they are *bluish*. Never are these exanthems *coppery-red*. On the epidermis, though, a hair projects from their centre, the hair underneath *never* suffers; they also do not affect the *nails*, though this has happened, in my practice at least. The condylomata *have a pedicle*, while syphilitic sores have breadth, make the hair fall out, cause the hair-glands to become sterile, and the nails to become deformed. According to my experience, the

deformity of the nails, in sycosis, arises from insufficient nutrition; the nail is never completely formed. It looks as if torn and isolated, broken through to the quick, while the syphilitic deformity consists in hypertrophy. Yet I should not consider the question touching these causes of the various deformities of the nails quite settled.

The *ulcers* which belong to the sycosis of the old, and the leucæmia of the modern physicians, can, however, be very easily diagnosticated as identical and non-syphilitic. They arise from the previous exanthematic or from *furuncular* or erysipelatous forms, or a single one presents itself upon the *neck*, the *sternum*, the *loins*, the *throat*, in the *axilla*, on the upper part of the *arm*, the *thigh* or the *shin*, not seldom on the *great toe*. They frequently exhale the most offensive odor, do *not* go very deep, but extend very rapidly in *surface*; the parts adjacent suffer but *little* in proportion; their base is a *bluish red*, *dark-brown*, *cracked*, and from the cracks *papillæ* emerge with whitish points. The edge is jagged, undermined. This ulcer is found also, in the same manner, upon the mucous membranes, though upon them it is *bright* or *rose-red*. It generally leaves behind it *callosities*. If it is not interfered with externally and merely covered with moistened compresses or lint, it heals from the *centre* outwards, and *never* with any other loss of substance than that which the cicatrix occasions. As soon as the cure begins, it takes on the character of those ulcers which are *incidental to the peculiar bodily constitution*. According to its outer form it is scrofulous, scorbutic, tuberculous, etc. By its *location*, its *course*, its *quality* and its *termination*, it *never* can be confounded with any other ulcer, and all the less, since, like all other *sycotic forms*, it *usually heals spontaneously*, provided no radical cure by art intervenes; because they form only transient *stages of one and the same, often life-long, process*. It heals up, however, only to *return*, with perfect certainty, *at some other time, in some other place, even at the end of years*, and that indeed, as with all sycotic forms, usually during a long period of damp weather, or towards spring, provided the process has *not gained in extent*, and in place of the ulcer, *another sycotic form* has developed itself.

In the cavity of the mouth and throat it is sometimes yellow, lardaceous, but with a *rose-red* areola, and covered with a puriform matter; yet it always spreads with the greatest rapidity, and *occasions*, as already observed, no loss of substance, or rather the loss which it does occasion, is soon made up again by granular outgrowths. In practice, however, we are not able to define, so exactly, the limits between the *precursors* and the *complete extension* of the so-called sycosis, as the theory of the older physicians was inclined to assume;

I, at least, have not succeeded, as yet, in finding a law of constancy, §§. 39, 293, in its extension. Nevertheless, one can not very well confound its appearance with the so-called metastases. The idea of *metastasis* or *aberration*, §. 37, belongs, at any rate, to hypotheses quite devoid of clearness. It even belongs to those which require explanation themselves, hence by which nothing can be explained. A wandering of molecules, as if, for instance, we might imagine that of the molecules of the pigment of the eye, to other parts of the body, cannot be demonstrated. Thus the black pigments in the liver, after fever and ague, must be looked upon as having wandered thither from the eye. Then, at least, a diminution should be perceptible in the eye, which is not the case. A rich imagination is able to explain everything from its own standpoint, by which no service is rendered to science.

The idea of the metastasis of morbid products is false even, *because contradicted by the law of the specific lines of direction*. We know, it is true, of wandering morbid causes and of the diffusion of their results, but nothing of wandering physiological products, except in the direction towards the organs of excretion.

If the chronic form of sycosis attacks the osseous system, then the bones affected are those of the *nose* and the *cavity of the mouth*, the *palate*, the *upper and lower jaw*, the *sternum*, the *sacrum*, the *ribs* and the *spinous processes* of the vertebral column. But the sycotic ozæna lacks the fœtid odor of the syphilitic. The bones, in fact, are *not immediately affected* by sycosis, but only through the soft parts, through the periosteum, and then there is never a *carious* form, as in syphilis, but always *necrosis* only with formation of sequestrum, and sclerosis; and, while the loss of substance of the bone, produced by syphilis, tuberculosis, scrophulosis is never repaired, after the course of sycotic necrosis there is always formed a *new thick osseous mass* which seeks to supply again all the loss sustained.

Fragilitas ossium is never a sign of sycosis, though *rachitis* is, as well as *pædarthrocace* and *enchondroma*. The older physicians collected all *strictures* or *stenoses* under the head of sycosis; not merely stricture of the urethra, but also stenosis of the *œsophagus*, the *larynx*, the *trachea*, the *rectum* and the *intestinal canal*. The acute sycotic inflammations of the joints always present, as a result, a *persistent enlargement* of the parts forming the joints, if they ankylose, and they attack most generally the joints of the *vertebral column*, of the lower jaw, and, most frequently, one of the *knee and elbow joints*. The pains arise *suddenly*, and at once, with the greatest intensity, but notwithstanding this, the *integuments* remain *normal* and *no fever*

sets in. Inflammations of the testicles develop into enormous *hypertrophies* and indurations, as well as those of the *inguinal glands*.

Syphilitic *deafness* is the result of carious destruction of the *ossiculæ auditus*, the sycotic, of swelling of the Eustachian mucous membrane. The profuse *greenish* mucous secretion in *inflammations of the conjunctiva, sclerotica and cornea* with *bright red* injection: the *gelatinous* effusion into the iris and choroidea is always of sycotic origin, as well as ciliary and facial neuroses from pressure of the bones and, especially, if they occur in the evening. *Trachoma* also belongs here, as well as the *polypous formations*, and *hydrocele*; among the neuroses a form of *ischias*, of *trismus* and *tetanus*, of *epilepsy*, *eclampsia*, *paralysis*; moreover, *one* form of *apoplexy*, of *impotence*, of *sterility*, of *nymphomania*, of *mental disorders*; going to sleep of the limbs; *helminthiasis*; one form of *intermittent fever*; *sclerema neonatorum*, etc.

In addition to these I must make mention of the sycotic *inflammation of the lungs*, which, it is true, is less distinct than the sycotic inflammations of the eyes, though clearly enough described by the older physicians.

In pneumonia, where we find the *blood slowly coagulating*, of which, the form curable by *Natr. sulph.*, presents the most serious phenomena, there is never absent, as indeed it is never absent in any of the acute forms which belong to sycosis, that *inexpressible anxiety* which stands in no proportion at all to the course of the disease, which is frequently torpid even; moreover, *hoarseness* is never absent nor *dyspnœa*, which latter also stands in no proportion to the extension of the disease physically ascertained. Further, this pneumonia is characterized by the most uncommon *prostration of strength*, the *greenish*, copious, *easy* expectoration, the unendurable sensation of weight and tension upon the chest, with so little stitching pains in the form curable with Iron, that the patients, after a few days, can return to their calling, provided it is not attended with bodily effort; but *anxiety* never allows the patient to go into the open air; even going up a few stairs produces *asthma*, which does not well correspond with the ease with which the lungs move in respiration. The organism (in both forms) sensibly sympathizes so far, that *emaciation*, and a sickly appearance, in a few days, attain a surprising degree; the urine is generally, as indeed it chiefly is, in the sycotic form, of a *rose-red*, as the older physicians were wont to express it. Under improper treatment, this pneumonia goes over into chronic *catarrh* and the parts of the lung affected into connective-tissue-like *induration* of tissue; this happens especially *under the abuse of quicksilver*, or from *suppression of the*

process by the water cure. From this chronic catarrh, plithisis ulcerosa afterwards arises, which is not seldom confounded with the tuberculous. Under appropriate treatment, however, this pneumonia is very easily cured, of which more anon. The autopsy of maltreated sycotic forms, revealed also to the older physicians whom I have quoted here, such extensive *obliteration* of the bronchi, and of the *blood vessels by fibrinous clots*, as are found in no other form, and remind one of the *Thrombosis* of Virchow. At the same time, other sycotic changes are always found in the cadavers as we have just seen. A great number of such sycotic cases could be adduced from the current literature alone, as, for example, from the current year, 1858, the vomiting of blood of Dieberder and Fauvel; a case of cancer by Benjamin; induration of the peripheric lymphatic glands by Zeissl; a case of leucocythæmia by Huss; a case, the second one, of laryngostenosis by Güntner, etc., etc.

Much that is described under the name of lipoma, gelatinous and colloid tumors, especially gummata, is of sycotic kind, as also much which is grouped together under the head of cancers; soft cancer is essentially to be distinguished according to its sycotic or other origin.

§. 298.

To the older physicians, the differential diagnoses already given, not only availed for recognizing a sycotic affection, but also the test of the benefit or injury of their treatment, led them thereto. They learned that all these forms *offered obstinate resistance to quicksilver*, and that, sooner or later after its use, *marked exacerbations or extensions* of the disease occurred; they learned that all these forms would bear no *irritating* treatment, and *no strict diet*, but that *sometimes Iron* (which is hurtful in syphilis), Graphites, Arsenic, Baryta, Antimonium, Aurum mur, *sometimes* Sal Ammoniac, Nitre, *Glauber's salts* exerted a favorable influence even where they did not cure; to their pharmacodynamic art *Strictures* were quite inaccessible, though they sought to overcome them by operative means; the same of polypi and carcinomatous degenerations. Of the serious consequences, they attempted to meet dyspnœa by Opium, *epilepsy* by their nervines, *dropsical phenomena* by their diuretics, etc., just as it is done at the present day in physiological medicine, and that, indeed, with the same ill-success and uncertainty as now.

Even in Rademacher's school we find the chloride of barium, Gold, Antimony, Arsenic, Iron, even Calcareo carb., also, Carbo veg. and animalis, and Natrum nitricum, but not *Glauber's salts*, of which more

anon, all these laid down, in general, as *remedies for the glands*, yet with reference to Homœopathic drug-provings, and, generally, in cases which belong to the so-called Leucæmia or Thrombosis, in brief, to Sycosis.

If we read the descriptions of the older physicians of their sycotic forms, we would think, at every moment, that we were reading Virchow as he describes cases which he arranges under the head of the microscopic curiosities of leucæmia, or the coagulation of fibrine, or under the pathologico-anatomical name of Thrombosis and Embolia. Although I presented fragments only, upon this subject, from both the different sources of information, which suffice for the end in view, yet, I doubt not in the least, that the reader will entertain no doubt touching the identity of the sycotic forms of the older physicians and the leucæmia, thrombosis, etc., of Virchow. There is no other difference than this, that the older physicians exhausted their subject thoroughly, as regards its extension and cause; that they possessed differential diagnoses even, for example, between sycotic phthisis and tubercular; between sycotic pneumonia and croupous; between glandular swellings in scrophulosis and those of sycosis; but, with Virchow, there is such unbounded confusion, such a guessing and laboring, such a desperate wrestling after cause and effect, such a hopeless separation of connected pathological processes, disturbing the reader, that there can scarcely be presented a more forcible example of the chaotic unwarranted proceedings, such as we can meet with in physiological medicine only; in that same physiological school so proudly clamoring over and boasting of its exact knowledge — boasting of experiments without rules, and haughtily looking down, without any reason, upon all other scientific labors.

How now can these diverging attempts at explanation, and these assertion of facts be harmonized?

As most appropriate for the views of the majority, whose poverty in exact knowledge first needs consideration, we first take up the chemical reflections.

We have just learned that in leucæmia we have gelatin-producing substances, and, consequently, formic acid and hypoxanthine, and a *greater proportion of water in the blood.*

These changes must stand in necessary connection with the blood, even when these substances appear in the secretions, since here, influences working a change upon one, must needs also effect a change upon the other.

We find, common to all these pathological forms in question, not merely gelatin in the blood, but we find in others belonging thereto, a

profuse production of *mucus* also, and, in all, an *increased proportion of hydrogen in the blood*, especially when they have developed into the leucæmic form, which may happen sooner or later. All these exudations are gelatinous, quivering; at any rate, their coagulation is incomplete and unusually delayed; the liquified products are greenish, bright yellow, brownish; the acetic solutions of the gelatin formed, and the solutions of the mucus, are not precipitated by the ferro-cyanide of potash, and, thereby are they distinguished from the exudations of croupous inflammatory processes from other causes, as well as further by this, *that they produce no fibrin*; for the fibrin coagulates from its gelatinous form in a few hours, and possesses the chemical properties of albumen; its acetic solution is precipitated by the ferro-cyanide of potash, etc. Moreover, the croupous inflammatory processes, which will be directly characterized more particularly, furnish *pus* as a product of their dissolution, in which *no gelatin* is found, since the *mucin*, which possesses a greater proportion of water than pus, *recedes*, while, on the contrary, albumen appears in its place.

On the contrary, no sycotic or so-called leucæmic process supplies pus or fibrin. The formative locality of the fibrin can be no more contained in the blood than that of mucus or gelatin. Since the fibrin is a hydrate, which exudes from the neighborhood of the diseased parts, these must therefore also be parts possessing albumen. Gelatin, however, pre-exists in the contents of the lymphatic system, but, chiefly also, in the *intercellular substance*, which, swollen up, is analogous to *mucus*. According to Liebig, the fibrin of the blood is albumen of the blood half-way converted into glutin, and *glutin can, under the influence of the respiratory process*, be decomposed into cholic acid, uric acid or urea, carbonic acid and water.

Hence we have, *thus far*, according to chemical, as well as morphological facts, two different series of diseases in general. There are thus, many forms of disease which come under the *fibrinous* series, but not under the *sycotic*.

On the contrary, all sycotic forms appear outwardly similar, even with red blood, and without any sycotic precursors. Thus we have, according to the cause, various forms of cancer, various neuroses, inflammations, etc., but physiological medicine would cure them all by one and the same method. This state of things is one of those, often mentioned, which bears the blame of the fearful confusion in the theory of physiological medicine, and, in the helplessness of its practice, and, *assuredly, the circumstance that all the so-called sycotic forms sometimes may disappear spontaneously, without any medical aid, has called forth the famous false method of expectancy.*

Most unfortunately, tissues and substances containing albumen and gelatin, resemble each other so much, in their chemical relations, that the slight difference cannot always be recognized as such. Not only because albuminous and gelatinous substances appear in dissolved, as well as insoluble, states, both have the same tendency to decompose and lose this property by Tannic acid and Corrosive sublimate: their solutions are precipitated by Chlorine, Kreosote, metallic salts and acids; both assume the form of jelly; *but*, also, because the excess of the precipitant, for example, of the Acetic acid, dissolves again the precipitate produced by it; because Hydrochloric acid, Quicksilver, Chloride of gold, Chloride of tin, the Salts of platina, the Salts of silver, the Sulphate of copper, and even the alkalies, now render turbid solutions of gelatin, now precipitate them, now leave them unchanged, all this must have contributed to the confusion, as well as the experience, that alkalies, as well as acids, render soluble gelatin-yielding substances, (which, when organized, are insoluble,) and deprive them, at the same time, of their agglutinating power, and that they accomplish this without any reception or transfer of elements taking place.

As regards Therapeutics and Pathology even, we must not forget that the cartilage likewise belongs to the gelatin-yielding tissue, but that *solutions of glutin*, although they take up considerable quantities of the salts of lime, the importation of which is evidently brought about by means of the blood, *yet do not take up solutions of chondrine*, and just to this very circumstance rachitis, the central enchondroma of the bones, etc., are to be ascribed; to the former, the formation of osseous lamellæ and calcareous incrustations in puerperal fever, as well as in many of the so-called jelly-like tumors, etc., etc.

On the other hand, it is evident that Gold, Iron, Antimony, Baryta, Arsenic, the Salts of lime, China, etc., must have curative results; *but only for definite forms*, to diagnose which differentially, physiological medicine has, as yet, proved itself incapable.

But besides those, there are other chemical momenta which explain to us *various forms of the sycotic* or so-called *leucæmic* process.

Thus it is shown, that epidermis, connective tissue and cells yield gelatin, and we find *these formations* never directly crowded out sycotically, and so little that we find the most various *hypertrophies* of connective tissue, and *cell formations* in sycosis. The difference of the time necessary for gelatinization, as well as the quality of the secretions, surely cannot be ascribed to the process, as such, but rather to its foreign admixtures of salts, water, albuminous bodies, extractive matters, according to the organs in or upon which they are formed.

Thus there arise, even within the sycotic process, two series again, which are *chemically* different, but appear under forms *externally alike*. But, because the purely chemical view of physiological medicine originates in the fallacy that what shows similar chemical products can arise from a similar cause only, it hence does not know how to explain to itself the varied contents of forms externally alike, and hence, frequently finds different results from the same causes, and the same effects from different causes: facts, which it can never make clear to itself from its low standpoint.

If we leave the physiological and pathological chemistry which, as we have so often demonstrated, can give us but little information with regard to the therapeutics of sycosis and leucæmia, it will be nevertheless clear, from the foregoing, that in therapeutics, we have not only to do with two series of chronic diseases, as we had to suppose a while ago, but with *three*, since, within the sycotic itself, two series are contained.

We may now apply a rule, according to the present standpoint of general science, to the observation of the older physicians, and thus it follows, that, for example, we recognize many pathological forms of Hahnemann's psora-series in the sycotic series, *but with nutritive and functional changes*. Analogous to this, the so-called Hahnemannian antipsorics are likewise divided, and, amongst them, Carbo veg. and animalis, Calcarea, Aurum, Arsenic, Iron, Thuja and others must be assigned to sycosis, while Sulphur, Copper, Phosphorus, Quicksilver, etc., remain for psora, which also perfectly clears up many doubts touching experiences at the sick-bed. The chancre-virus, the so-called syphilis, *never* forms a series of pathological forms in such extent and permanence as sycosis, and the so-called psora, to which latter belong *all fibrinogenic and pyogenic forms, as well as those produced from lack of ozonization of the blood*. On the contrary, the few forms which originate from the chancre-virus, are very easily diagnosticated and cured; more difficult, however, when they have entered into combination with other substances which nourish them, or are in juxtaposition with them, as, for instance, with traditional doses of Quicksilver. I will remark, however, at the same time, that Quicksilver, deservedly so ill spoken of and admitted to be a two-edged instrument, can never and under no circumstances in traditional doses, be looked upon as a curative remedy, because it enters into insoluble combinations with the albuminates of the organism, upon the same lines of direction as the chancre-virus, while the latter forms only soluble combinations therewith. But the form of syphilis, for this very reason, only deceives, as regards the cure by

Quicksilver by juxtaposition; for, after such pseudo-cures, not only Iodine, but also Iron, Sulphur, etc., can remove it at any moment from this combination and expel it; whereupon, for the most part, all the earlier syphilitic symptoms reappear, §. 100. For the diagnosis of syphilitic sequelæ, I hold, with Ritter and Wolf, the following as decisive: difficult motion of the joints with crepitation, chilliness at stool and persistent sleeplessness.

As regards Rademacher's school, I may now be more brief, since, at any rate it cannot have escaped the reader, that its Copper series corresponds very closely to the Hahnemannian psora, its Iron and Natrum nitricum series almost exactly to two different forms of sycosis. I confess that I attach great, at least practical importance to these classifications, of which I shall, very soon, treat more fully, although they frequently present combinations among themselves at the sick-bed; yet, to the beginner in practice, they offer the most valuable points of support. Hence, we may accept it, as demonstrated, that the designations Psora, Syphilis, Sycosis, Leucæmia, ought to be considered *equally wrong*. They do not present us either with all the causes or effects, and especially it cannot be decided whether Rademacher or Hahnemann was more in the right; whether, for example, only the sycotic poison occasions those forms of decomposition, or whether atmospheric and telluric influences even may not produce the *same* specific blood-constitution and the *same* changes.

§. 299.

Corresponding to the formula which I have declared to be the law of specification, the form and function of a plant cannot be conceived of, without the earthy constituents subserving to its nourishment, in which it strikes its roots, and without the atmosphere, the constituent parts of which, its leaves of necessity inhale and exhale. Just the very same holds good for the human organism. The constituent parts of the atmosphere, oxygen, carbon, hydrogen and nitrogen, of which the whole organism is composed, and which are even contained free in the blood, belong as well to the fulfilment of the law of its specification, as do the constituents which it draws from food, and which are necessary to it on account of the same demand. Hence, all these substances form nothing *external* to the organism, intended to change its specific form of reciprocal action. But often, not only the mode of life belongs to Physiology, Pathology, and Therapeutics, but, in a far more extensive sense, the changed atmosphere, even.

For it has been demonstrated by Admiral Fitzroy, with the help of the telegraph used in meteorological investigations, that, for example, together with the phosphorescence of the atmosphere and of organic bodies, with the increase of insects, and increasing proportion of ozone in the atmosphere, certain diseases, as Epilepsy, Apoplexy and suddenly fatal affections of the vessels and nerves, form eighty per cent. of the diseases generally recurring in constant proportions.

Thus a *change* in the constant whole of the organism is determined also by the qualitative and quantitative changes of the atmospheric constituents.

If we consider all the conditions which are known to us as causing chronic diseases, the following proposition may be established in view of what has already been advanced; *the cause of chronic diseases is based upon the excess or lack of substances, of which the organism itself is composed.* Hereto, consequently, belong not only the different states of the atmosphere, but, as it seems, those causes also to which we ascribe the production of sycosis, syphilis, scrophulosis, tuberculosis, etc., etc.

If the causes of chronic diseases did not possess similar qualities with those substances out of which the organism itself also is composed, how could it be explained by natural laws, that they are retained often for years in various parts of certain organs, again come to notice from trifling causes, in order to establish themselves in other directions and other localities, often of the same tissues, etc., and thus the whole life through, provided that no cure, according to natural law, has been undertaken.

Hence it should never be overlooked, that neither foreign qualities nor quantities can furnish the *only cause* of chronic diseases, let them be ever so similar and indeed almost the very same in their effect; but only these as part of the conditions in *connection* with *others* pertaining to the organism and previously existing; and that *the united result* only of these two conditions, is what can present itself to us as a form of chronic disease.

A single symptom of any chronic disease whatever, if it be taken from its *causal* conditions or borrowed from its *external phenomena*, can, hence, never express any existing pathological form of the organism.

Consequently it would not be justified, from the present standpoint of science, to attribute an event accidentally precedent or subsequent to any chronic disease-form, as its only cause.

The utterly arbitrary schemata of such disease-forms, according to the *causal law*, ever have led and still lead to the cardinal mistakes in

the Therapeutics of physiological medicine, since this law misleads to the use of non-existent anti-syphilitics, anti-scrofulosa, and, as mentioned before, to antiphlogistics, etc.

Homœopathy, however, by virtue of its scientific synthesis of the results from drug-provings with the phenomena of disease, always and promptly steers clear of these dangerous cliffs, *and for the very reason that, on that account, it needs not accommodate itself to nosological names.* But that it at the same time, seems at present almost to have forgotten the Hahnemannian psora, sycosis and syphilis cannot be excused, because no observation of a great man should ever be left to neglect.

Had the study of the different states of the atmosphere been more pursued in their modality, determining as they do the qualities of the organism more powerfully than every other influence, then also the disputes between the mercurialists and anti-mercurialists about primary, secondary, and tertiary syphilis, had never arisen, and Virchow would not have been compelled to accuse himself of the incongruity which obtains between the substance of the above paragraphs cited from him, and that of his treatise in the Archiv. f. pathol. Anatomie and Physiologie, B.I. XV., upon the nature of constitutional syphilitic affections, in which he throws together all the above-indicated forms of sycosis and syphilis with his leucæmia, as the consequences of *one* cause.

Nosological names are empty ideas, possessing no reality, and to seek to direct one's Therapy, according to causes alone, or external signs, must necessarily lead to no other but unfortunate results.

Thus it is certain that leucæmia is not, as Virchow thinks, a disease *sui generis*, but a microscopic curiosity, in which physiological medicine is so rich; further, that these diseases, in which leucæmic blood appears, offer many other momenta in themselves more decisive, alike for anamnesis, diagnosis and even prognosis, than the microscope, and all of them more readily perceptible. Upon the whole, I maintain that he bestows far more benefit upon the practicing physician, upon the weightiest part of his calling, the practice, who enables him to dispense with the microscope and all the time-absorbing chemical investigations, as far as possible, than he who would make diagnosis, prognosis and indication always dependent upon such labors, and from lack of the necessary knowledge, and, of the art of observation, is reduced to such experiments; for, by and by, the practicing physician must always have a porter at his side, if he would carry along with him all the chemical and physical utensils, and the day should be at least ten times as long, if he were absolutely obliged to

use them. But this is so little the case, that I have myself cured very many chronic diseases, among which, especially, were many forms of intermittents which had been treated in vain with Quinine and Arsenic by physicians of the physiological school, sometimes in patients hundreds of miles distant, and whom I never saw; many acute diseases, also, in patients whom I never saw, though so near at hand that I could have visited them in a very short time, had I been allowed only to do so. Such a thing, surely, cannot be undertaken by those who are dependent upon the art of experiment only, and are hardly capable of instituting a searching examination.

If I am required to produce examples of combinations, in the sense of the previous paragraphs, I mention the above case of acute rheumatism, §. 251, which was cured with Benzoic acid, but previously had to be treated with Sulphur; or all the cases in which, even in physiological medicine, cures may occur with the Iodide of Iron, etc. Even this displays the therapeutic degeneration of the physiological school, that it never occurred to any of its adherents that those cases which can be cured with Iodine and Iron might be combinations; and that, on the contrary, they give Iodide of Iron so frequently, even when there is no sense in prescribing it.

§. 300.

A still further extended explanation is surely needless, for experts, in order to consider the fact as proven that physiological chemistry is very good and useful indeed for the logical form of induction or the third therapeutic-deductive operation, *i. e.*, for sustaining confirmatory grounds of a therapeutic procedure; but that it never can give, with the same certainty, a leading maxim for therapeutics, *i. e.*, therapeutical indications, as the Homœopathic drug-provings alone can do.

Physiological medicine sets up as a leading principle, that, for example, in order to appease hunger or quell thirst, we must first inquire, by experiment and observation, what organs, and which of their functions suffer by the sense of hunger and thirst; how and why they suffer so and not otherwise; what chemical changes of the secretions appear with hunger and thirst, and what products of suffering are thereby begotten; further, what physiological causes produce hunger and thirst, and, from these investigations, it expects to see results arise which shall determine with what *substances* hunger is to be appeased and thirst assuaged. §. 58. But as long as these physiological problems have not found their solution, men must, *nolens volens*, hunger and thirst, and we ought, therefore, frankly to confess

to them, that, at the present time, we are in ignorance of the means by which hunger and thirst might be rationally removed. Notwithstanding this maxim and this confession, curative attempts are nevertheless made, which are devoid of any solid basis whatever.

Thus it happened, also, with leucæmia. Although those sycotic swellings, as they were called by the older physicians, are not glands, by any means, but, as Virchow himself says, new-formations, yet physicians of our days even, cannot break away from the power of association of ideas, and because these formations resemble, externally, glandular swellings, although, according to location and contents, they are nothing of the kind, they give their patients Iodine for the present, till they shall have learned, at some future day, what in reality is the peculiar nature of leucæmia; or they send them to a sanitarium, whereby they must inevitably, and now much more quickly perish, as experience teaches, and this termination can be foretold, as absolutely necessary, according to the teachings of this work.

Every time the physiological school betakes itself to giving drugs, it does it empirically, and without having any basis according to natural laws, for, although believing that it knows the disease and remedies for it, *yet it does not know the connection between the two*; a connection which is to be found simply and solely in Homœopathy, and is there deductively established.

It would have been far easier for me to sustain these remarks by examples taken from other pathological forms, but I chose leucæmia because it is, without comparison, the greatest creation of the physiological school, and is its pride. How barren this leucæmia has proved for the physiological school can be seen in Virchow's Manual, on the disturbances of blood-crisis by Vogel.

Now should we practicing physicians, while humbly sacrificing the experiences of two thousand years, have really to be content, laboriously and in a beggarly way, to reproduce them, atom by atom, within periods of time incalculable, and to wait until a *fallacy*, §. 58 — such as appears in the leading principle of physiological medicine — *has become a truth*? Should we permit ourselves longer to be led by fallacies, and not rather remember the words spoken by Diderot. "not those who teach a science are those who understand it; but those understand it who practice it earnestly, and to whom no time is left for teaching it"; or, that saying of Bacon, that young men at the Universities learn how to believe? And should we be bound to remain in this faith, since the school itself, on every occasion, changes its banner? Even physiological medicine strives after progress; but the manner of its striving arises from the longing for change, which, like the former,

is changeable in itself, and proceeds from the spirit of negation, always appearing as the first sign of developed consciousness, and which makes itself felt more and more sensibly, as is the case with boys.

Did not the school nourish itself, at all times and ever, from the results of practice? Although, since the last great shipwreck which Therapeutics suffered, in the year 1842, (Archiv f., physiol., Heilkunde) §. 202, the programme of *skepticism* has taken the liberty to turn these natural relations topsy-turvy, and, since that time, the most preposterous declamations met with admiration; yet the practicing physician, who, above all things, has the good of his patients at heart, cannot be in the least prevented from studies of his own which terminate in the manifest welfare of the public, and for this very reason, in favorable results, offensive though they were in some eyes. He cannot adhere to obsolete doctrines so long as might, probably, be pleasing to the school. Every practicing physician must *emancipate* himself from the school, §. 236, and become independent, for the very important reason that practical life offers him an endless number of cases which the school could not exhibit to him, and for the still more important reason *that, at the time being, no school knows how to establish its assertions and doctrines according to natural laws, and hence none can endow its pupils with permanent valuable doctrines.*

The Homœopathic maxim is something different; it prefers, to use again the trivial, nevertheless intelligible comparison, the practical way to find the substances with which hunger may be appeased or thirst assuaged. Since, for instance, it is not imprinted upon the mouth, upon the stomach, or upon the intestinal canal and its parts, or yet upon their functions or secretions, that in case of hunger and thirst, water will quench the thirst, and that bread will appease the hunger; since, also, all investigations, whether chemical, pathological or physical, will never hit upon any interpreter who will inform us, from the results of such investigations, what might be necessary; for this reason, Homœopaths, without any further loss of time, made *the experiment* on themselves, with various substances, and found at once what is to be given in every case; they thus found, empirically, the *connection according to natural laws* of substances proven, with the organism, and now the synthetic comparison must infallibly point every time to the substance indicated, with the certainty of demonstration, in comparison with which all earlier and other speculative methods fall into the back ground. Thus, by drug-provings, practiced for more than sixty years, we have a material stored away which has no further need of that circuitous search. But just this is the disagreeable side

of the matter, because the adherent to the physiological school prefers to play the skeptic and to experiment upon objects and relations which are always subjected to oscillations according to necessary natural laws, and hence the easy opportunity is given to every one of always discovering new colors in the chameleon in order to see his name connected therewith. §. 200. But the chameleon ever remains the same, and it is to be determined in what connection with the outer world, this change of color stands, and how it may be produced or interfered with by art.

§. 301.

HYDROGENOID CONSTITUTIONS OF THE BODY.

This much has become clear, at any rate, from the investigations which have been made, that there is a constitution of the body which, in many cases, is the product of gonorrhæal contagion. But one would very much err, as already said, in concluding therefrom, that, in this matter, the question were only as to the consequences of a sycotic contagion, *i. e.*, an infection caused by gonorrhœa; for the cause of those diseases, which Hahnemann arranged under the head of Sycosis, is one cause indeed, but not the only cause of the development of this state of the body, distinguished by *a too great proportion of water, or by hygroscopic blood.*

I always recognize this constitution of the body by the circumstances accompanying any disease whatever, and for these I always inquire as soon as the patient has told his complaints.

If the patient states that he feels *worse* in cold, in damp weather, and in the rain, then I know that I have to choose, among the remedies which are similar to his disease, such only as contain a greater per centage of a combination of O with C and H, consequently produce more heat, and diminish the influence of the water. Hence the symptoms of a disease, in this constitution of the body, are aggravated by everything which in any way increases the atoms of water in the organism, by baths, for example, and that, all the same, whether they are mineral baths or simple water baths; or whatever increases the attraction of the organic molecules for water, as, for example, the eating of animals even, which have lived in water, as fishes, etc. All diseases, in such constitutions, are increased by cold, also by cold and cooling food and drinks, for example, by sour milk, by hard eggs even, by cucumbers and mushrooms, but chiefly by living near the water, especially near standing water.

This experience is to me all the more of inestimable worth, since I have quite cured many, very many patients, simply and solely upon this ground, who have been sent for years by other physicians from one bath to another, where they never found any relief, but often the most marked exacerbation of their sufferings.

Another sign, that a disease has occurred in such a bodily constitution, I find in the *periodicity* of its phenomena, and chiefly *in its irregular and paroxysmal* course; for even the nervous system, which, next to the brain, in proportion to the other parts of the body, possesses by far the greatest percentage of *water*, reacts upon a plus of water with an energy commensurate with that with which it carries over its reflex influence upon the blood and other organic formations. The experiences of Rademacher and Hahnemann agree with this also, and these naturally should stand much higher in the regard of practicing physicians, than the researches of experimental physiology. I do not mean by this merely the one, two, three, four or eight-day exacerbations and remissions, but even those periods during which, for a still longer time, no disease seems to exist, and this extends even over months.

Hence, for the sake of brevity, I distinguish this constitution of the body, according to its causes and conditions, as the hydrogenoid.

I wish also to call attention to the effect of the electricity of the earth, spoken of at the close of §. 163; for these nervous affections, which are exacerbated by electric disturbances, appear under this bodily constitution; the sufferings, however, which are relieved by the equalization of the earth's electricity, we find in diseases which are wont to appear under the conditions of the following, the oxygenoid constitution of the body,

The chronic diseases which usually appear in this constitution of the body are distinguished as increased *processes of reduction*.

§. 302.

OXYGENOID CONSTITUTION OF THE BODY.

Our organism first changes nutritive substances into other chemical combinations, and then effects their combustion. What is no longer oxidizable is excreted; thus the substances of our bodies the least oxidizable, the milk and semen. These stand so low in the scale of oxidation, that they are not only used for the nutrition, but even for the formation of other organisms. On the contrary, there is

always more of C and H given off in the organism in the form of CO_2 , H_2O , or other combinations, so that products richer and richer in N remain. The last and richest in N is the urea. The carbo-hydrates also are soon changed into Glycogen, Grape sugar, Inosit, etc., and transformations of that sort are well known. The *neutral* atmospheric oxygen hence finds sufficient points of attack only when our food, and the constituent parts of our bodies, similar thereto, have undergone further transformation. Hence even blood super-saturated with oxygen cannot make more active the destruction of the body. Yet this occurs at once, as soon as processes are introduced, willingly or unwillingly, by which the transformation of food into those combinations, more accessible to combustion, is more fully brought about.

§. 27.

The constitutional conditions to final diseases in consequence of increased influence of oxygen, cannot hence arise from an absolute excess of oxygen in the atmosphere, but rather from the resistance of the organic structures against the influence of the oxygen being so much diminished, that these structures, from deficient reception of oxygen, especially in consequence of already weakened organs of respiration, are consumed in a far higher degree than in the normal condition of life.

As the nitrogen of the organic structures presents the greatest resistance to the operation of oxygen, still more than their carbon, thus it is the want of nitrogen and carbon which permits the consuming predominance of oxygen, and we may hence designate the frequently occurring connection of such conditions, so long as no pathological form has as yet developed therefrom, as the *oxygenoid* constitution of the body.

This constitution of body will accordingly be distinguished chiefly, 1, by want of albuminates and fat, and especially by the energetic consumption of oxidizable substances, wherein, 2ndly, the diminished accumulation of the solid constituents of our body, generally connected therewith, is to be brought into calculation, which constituents must essentially serve to maintain a vigorous life.

The development of this constitution might and should very often have been prevented, for, according to practical experience, it is often nothing else than the degeneration of the hydrogenoid constitution of children and youths protracted beyond the waking up of sexual life. Thus, from scrofulosis not cured, a form of tuberculosis develops, as is well known, quite as easily as from some neglected chlorosis, because the domestic medical care did not recognize the danger, or, at any rate, did not know how to prevent it. What, moreover, in a

very imperfect manner was recognized by the professors under the forms of *anæmia*, *leucæmia*, *oligocythæmia*, in the diseased child, but not removed, belongs here likewise, as well as many forms known as *atrophia infantum*, *rachitis*, difficult dentition, etc. These pathological forms the physiological school, or accident even, is able to scatter, without, however, having removed at the same time all the conditions of disease, though the uninformed may be deceived with the appearance of a cure. From these forms, in later years, even the conditions for *hyperæsthesiæ* and consumption arise.

Those who enjoy apparent health, under such conditions, *feel well or relieved* in an atmosphere which is saturated more than usual with nitrogen, even with carbon, with burnt resins and fats, with empyreumatic substances and the like. To a superficial consideration even, the fact is conspicuous that such individuals frequently refuse all sorts of animal food, as a proof that their organs can no longer elaborate in a concentrated state what they require, and that to them, the carbohydrates are more beneficial, as they offer them so many substances slowly oxidizable.

A characteristic symptom of this constitution consists further in this, that persons endowed therewith, hours and even days before the weather changes from dry to moist, are uncomfortable, and, if they happen to be sick, their condition is aggravated; also immediately before a thunder storm, which others do not notice in the least, while the actual fall of rain or snow removes all their pain; or, they feel best in *foggy weather* or even in the fogs which arise in the forests, especially in an atmosphere not cold, in which men with a hydrogenoid constitution feel the worst, and thereby, as in England, may be driven to the blackest melancholy, even to suicide.

This constitution may frequently be recognized, according to Lichtenstern, by ozonometry, by means of strips of paper worn upon the breast. This very ozonometry has shown that the quantity of ozone in our organism is *entirely independent* of the quantity of ozone actually present in the open air, but on the contrary is *wholly* dependent upon the individual conditions.

In the treatise of our colleague, Dr. Buchmann, "*Die Hydrometeore*," we possess a valuable statement of observations, which, in part, touch upon this subject.

That the tropical nervous system is prostrated in this constitution, especially in its functions, is well set forth in this treatise, though in connection with other views, and the experiences of my own practice correspond therewith in most instances, though not with the grounds of classification; for the author did not then know the difference

between the influence of the atmosphere containing ozone and that containing antozone, §. 99, nor the difference between the hydrogenoid constitution, which is essentially hygroscopic, and the oxygenoid, under the influence of which those possessing it feel the best, not in rainy but in foggy weather. Hence he confounds, as does A. Mülhry, with his system of zymotic diseases, these two distinctions extremely important for Therapeutics, because the ground of classification of both was not general, but a particular one only, for the general in the organism, lies neither in the geological nor in the meteorological alone, but mainly in the *material*. Hence not all of the pathological forms adduced by Buchmann, and said to be able to develop themselves in the so-called sensitive bodily constitution, do according to Reichenbach (Reichenbach on Odic Force) belong here; nor can, in this instance, the nervous system alone shape the judgment of the physician in practice.

On the other hand, among the diseases which may develop themselves upon the soil of the oxygenoid constitution, and to which Buchmann refers, very many hyperæsthesiæ must be reckoned, which have not arisen from mechanical causes, and which are painful under circumstances which give them the name of "almanacs," yet have no constitutional but a local significance only; many rheumatisms, moreover, if not all; but only a few forms of hysteria, chlorosis, urticaria, hæmorrhages, inflammations, and several diseases of the sexual system; of Mülhry's zymotic diseases, only one form of croup, influenza, syphilis, and some diseases from refrigeration of the cutaneous function, while the marsh fever, variola, puerperal metritis, elephantiasis, ophthalmia contagiosa, are also to be reckoned, it is true, with the zymotic diseases, though they can present themselves only in hydrogenoid constitutions.

Mülhry found himself induced by his micrological stand-point, to assume still other special dyscrasiæ and diseases of more general location, and besides these, local diseases, but these are mere peculiarities which do not admit of a general insight into these processes.

The following facts, as already said, are *particularly* adapted to throw light upon the nature of the constitution under consideration, viz: that the loss of positive electric tension in the clouds and fogs announces the *transition* to rain or snow; that the electricity of the fogs is without exception positive; that the electrometer at the beginning of a fall of rain or snow, usually indicates negative electricity; that, not only the water in thunder storms, but other rain water also, contains *Nitric acid*; that thus the state of the electric *tension* of the atmosphere most unpleasantly affects such constitutions, and, the development of the nitrous fumes brings them relief; that the elec-

tricity of the air acts only at the outset, and at the point of equalization. Hence, it arises, that this constitution frequently finds itself unpleasantly, if not painfully, affected before and during a storm, without coming in contact with it, because, even in violent currents of air, the electric tension endeavors to equalize itself.

I will close this subject with the further observation, that there is also a kind of rainy weather, during the continuance of which, patients of hydrogenoid constitution feel better, and those of oxygenoid worse, which seems to contradict what has just been laid down. But this may be explained by the experience, which I at least have always had the opportunity to make, that there is a kind of rainy weather with a large proportion of ozone in the atmosphere, as was especially the case in the year 1864, and this kind of damp weather can be determined, without ozone reagents, by observing that, in such rains, the tops of the mountains and forests do not smoke, *i. e.*, from mountains and trees no mists arise.

That the chronic diseases which develop themselves in this bodily constitution rest upon exalted processes of oxidation, needs no further explanation.

CARBO-NITROGENOID CONSTITUTION.

§. 303.

The truth of Hahnemann's psora-theory is not only doubted, but as already said, roundly denied. The manœuvres of attack hitherto used against this theory have remained without result. The fruitful source of all knowledge, however, is by no means to be subdivided into *skepticism* and *negation*; it rather springs from two great domains, from that of nature and that of intellect and history. Hence the imperfect views of skeptical as well as negative judgments, as regards the subject in hand, can only be met thoroughly by striving, in our investigations of this subject, to unite the results of both domains; consequently, as already said, by undertaking on the one hand the general subordination of the phenomena of nature to the laws of nature pertaining thereto, and by drawing the explanation of these natural phenomena and facts from their *connection* with these laws, and on the other, by not merely considering a fact as it showed itself with the past, but as it appears at the present, so that the thought, which originated with our ancestors may be perfected by our great-grand-children.

There is, perhaps, no subject which formerly appeared more mysterious and inexplicable, but which at present is more fully explored, than the course of the stars and the nature of the constellations; and the evident certainty of this subject has become established only in the manner just pointed out. What floated before the mind of a Heraclitus, Philolaus, Plato, and Aristotle as a lofty vision, has become an exact science; and should that which was taken by the mind of a Hahnemann as a fact, and has been recognized by thousands of practicing physicians as true, be sacrificed to the subjective views of those who forever remain the slaves of *pitiabie doubt*, considering, as they do, all philosophic thought as a sort of intellectual vertigo?

1. Let us take, for example, one of the most recent opinions from the Homœopathic literature touching the psora-theory, which may be expressed by the following words: "The young Allopath, Hahnemann, knew the itch-mite; the psora-theory thus amounts to faith in miracles; hence, the old Homœopath, Hahnemann, was a mystic."

The force of this assertion rests upon the precedent proof, that Hahnemann knew of the itch-mite; a fact which no doubt has thus far escaped most Homœopathists. But, besides, the logical deduction of an inference, as is well known, is based upon certain general conclusions already established, *i. e.*, upon the series of conclusions, and this again upon the fundamental maxim, that, if two bodies are equal to a third, they must be equal to each other. But here the first proposition even is not a general one; for the youthful age describes only a part of Hahnemann's life; hence this proposition is only a particular one, from which clearly no other particularity can be deduced, as in the fallacy: the earth has inhabitants; the moon is an earth, therefore the moon has inhabitants.

Hence, it is clear that the second proposition also, "the psora-theory, is a mystery," on account of its derivation, can contain no well-grounded inference, and has nothing to do with the itch-mite, and nothing, moreover, with Hahnemann's power of judgment.

Others say again that since the itch-mite is the cause of the itch, the psora-theory, therefore, which cannot be deduced from the itch-mite, must be illusory. But even this conclusion waits, as yet, for the objective validity of its proof; for, in this inference again only the empirical observation of the itch-mite is drawn into comparison with an idea of the psora-theory, which has nothing whatever to do with the itch-mite, because the psora-theory is an explanation of facts, which have arisen from the *conditions* of the human organism, thus do not owe their origin to the itch-mite merely, but also to the *causes*

of the origin of the itch-mite itself, for instance, and this, even according to Hahnemann, to sedentary habits and damp air, to which must be added also the unhealthiness of men. Under such influences, the itch-mite is developed, as are other vermin, although pathological anatomy thinks itself permitted to assume that the itch arises every time only by the transfer of the mite from one affected man to another, according to which supposition the itch-mite even must have had an Adam and Eve.

§. 304.

2. All sensible perceptions come without our co-operation; they are compulsory. *Inferences*, on the contrary, are products of reason, and transcend perception. He only who observes the itch-mite has a perceptive knowledge of it; it is empirical. It is quite another matter that Hahnemann, in connection therewith, observed subsequently, that, after the presence of the itch, numerous sequelæ followed; for this knowledge springs no longer merely from sensible perception, but from reflective reasoning, and includes anything mystical as little as does the observation of the secondary and tertiary symptoms of syphilis.

Whoever, I repeat it, made clinical studies at a time when the itch was to be found spread over all parts of the cutaneous surface, except the face and the genitalia, and had only been suppressed by external means, has himself observed, in concordance with Hahnemann, very frequently, even during this external treatment, the sudden occurrence of fatal inflammation of the brain or lungs, diffused gout, dropsy, etc.; at the same time, no other cause could be found for all this, than the change of all the functions of the cutaneous surface by the itch and its injurious treatment. Thus he had even the sensible perception thereof, yet thought as little of pronouncing the itch-mite the *only* cause and condition of these diseases, as he would declare the operation for rectal fistula as the only cause and condition of the tuberculosis following it. Even if pathological anatomy is not willing to believe in the so-called *dyscrasia scabiosa*, because no such case has as yet come under its knife, neither should it believe in the indubitable connection of the cicatrized rectal fistula with tuberculosis, because it has, in this instance also, only the fact of the cicatrix and the tuberculosis before its eyes, and the constitutional conditions of such a connection lie *without its sphere*.

All negations of the psora-theory, as we chance to read them in medical literature, are, like the above, always groundless views and never

present a perceptive *positive* representation of the idea thereof, a condition absolutely necessary to the corroboration of the inference. The mere denying and doubting of a subject clearly does not lie in the subject, but in him who is not *willing* to accept it. Hence every negation and every doubt which is not removed, ever stands as a striking self-accusation of him who denies and doubts.

§. 305.

3. All our perception, on the other hand, thus even that of Hahnemann is relative, and hence acquired only from the relation of the activity of an *entire* human life to its exterior world. From all we know of Hahnemann's life and strife, no one is justified in maintaining that his intellect had waned from the year 1792, when he saw the itch mite, till 1822, when he published his psora-theory. On the contrary, his life theoretically, as well as practically, was resplendent with uninterrupted *productive* activity.

As surely as man, in his natural existence, is bound to a series of conditions for ever the same, so surely is he (in proof of his progression, not of his retrogression, in his intellectual being and doing), always another, and of this every Homœopath presents a living example. First, we saw in the Universities nothing but facts, floating in mid-air, which facts the physiological school presented us without any well-grounded theory, *so that all our procedures at the sick-bed assumed the character of the instinctive*, till the irresistible craving for truth and success had driven us to experiments, which compelled us to test the doctrines of Hahnemann, and, since this test offered to us what we sought, to discard the gloomy doctrines of our teachers. Have we thereby degraded ourselves to faith in miracles? Do we not rather follow the same course of progress as Hahnemann did when he was led by new facts and observations, to a theory which comprises not only the itch mite, but also a series of changes within the organism, the beginning of which he considered himself compelled to recognize in the well-known exanthem?

Thus let us examine, before making *tabula rasa* of this theory, the material, nutritive and functional relations of the diseases and remedies pertaining to the psora-theory, and let us prefer, for the benefit and advantage of our science, to clear up, according to the present stand-point of general science, whatever appears dark in this theory, instead of rejecting it without *exhaustive* reasons, whereby nothing is accomplished.

Here we touch, it must be admitted, upon a point which, for the psora-theory, in its bearing upon the acquisitions of our times, might prove to be rather disastrous. We truly observed for several decades, not only so marked a decrease of the itch in consequence of police regulations, that the impossibility of further injuries arising from the quite insignificant lesions upon a few places of the skin became quite clear to us, but also in individuals who cannot scratch themselves, by reason of paralysis, although we find the mites and their galleries, we do not meet with the eruption on the skin usual in former times. But are these indeed *exhaustive* reasons against the psora-theory? Surely not, for nevertheless, the same disease-forms entirely unchanged, are wont to occur to-day which Hahnemann reckoned among the consequences of the itch, and, in the midst of these corresponding facts lie the *remedies* which Hahnemann declared to be anti-psorics, and with which, to this very day, we treat and cure those very disease-forms. Consequently, the effects of these remedies present us with the infallible reagents, by the aid of which we may learn what actually existed in former days even.

The relation of these effects, which thus joins theory with practice, has remained to us; it is hence the pivot about which the whole question has to turn. If we now study these effects, we come indeed upon *uniformities* which shed a new light upon the whole question, and such a light that we can answer it conformably to the laws of nature.

A. Sulphur is the special representative of Hahnemann's antipso-
rics. As previously stated, Dr. Böcker has taught its mode of operation, which he in general found to be this, that, under the use of Sulphur, all the *excretory organs were aroused to increased activity, and carbon and nitrogen were excreted from the system*. These excretions are either substances no further oxidizable or products of oxidation, and thus demonstrate the increased activity of the oxygen produced by the Sulphur.

B. It is no less well known *that there are many chronic diseases which are actually accompanied with diminished excretion of Carbon and Nitrogen, as pulmonary catarrhs, exanthemata, etc.*, and, we finally know, that such diseases may be partly inherited from one's parents, partly occur as sequelæ of previous diseases, partly arise directly from external causes *which diminish the oxidation of the blood, etc., and necessitate an accumulation of carbon and nitrogen*.

C. Now since Sulphur can, even at the present day, cure such diseases as Hahnemann reckoned among the psoric diseases, because it

increases the processes of oxidation in the organism, the constant course of all these events is accompanied by causes and conditions, all of which are governed by a definite *material* relation of the *carbon and nitrogen* present in the body, to the oxidizing power of the oxygen.

These correspondences, according to A., B. and C., admit thus of a conclusion upon the fundamental maxim that, when two bodies are equal to a third, they must be equal to each other, and we are, hence, in condition to reduce the psora-theory to the law; *that those material causes and conditions produce such diseases as may be cured by Sulphur, or by such other remedies whose fundamental effects are similar to those of Sulphur.*

4. For the further establishment of what has been said, I add the following physiological, pathological and therapeutic facts:

The blood, as we know, may contain certain quantities of oxygen which must not enter into chemical combination, just because the oxidation of the constituents of the blood depends upon the proportion in which the excretion of carbonic acid ensues. Hence one of the sources of the formation of carbonic acid is unquestionably to be sought in the blood; but the carbonic acid excreted from the blood arises, for the most part, from the *substance* of the organs rich in nitrogen; the organs themselves breathe. Hence, with diminished excretion of carbonic acid, a diminished excretion of nitrogen must take place, *pari passu*, and the respiration, as is well known, is rapid, in proportion as the blood is poor in oxygen.

For these reasons I recognize as the first *constitutional* results of the causes which retard the influence of oxygen in our organism, not only the fact that the patients feel *best* in the open air, that cold and moisture produce with them *no aggravation* as in the hydrogenoid constitution, but chiefly, also, in the frequency of respiration induced and increased *by the poverty of the blood in oxygen*, this *frequency of respiration* being frequently combined with diminished capacity of the lungs and diminished expansion of the thorax; moreover, in the frequency of the pulsations, proportionally and simultaneously increased, since, with the increase of the respiration, the frequency of the pulse also rises. Upon the whole, however, the last fact, as the most conspicuous, first attracts the attention of the physician.

Now it is also known that a definite proportion of oxygen must be present in the blood, because, otherwise, the irritability of the medulla oblongata ceases, and the respiratory movements would cease; that thus, a cause which hinders the reception of oxygen, reaches, in its reciprocal action, to the medulla oblongata; that, finally, when this

irritability of the medulla oblongata has also become diminished by quite other causes, the same result occurs *conversely*, hence centrifugally. Although the blood on one side is the natural centre of the interchange of matter; although all substances taken into the organism from without, first of all enter into the blood; though almost all substances to be excreted, must have been immediately before constituents of the blood, and, finally the substances in almost every stage of their transformation, which they have to pass through, in any part of the organism, must first become constituents of the blood again, before they can undergo a new transformation, in another place; hence, although the blood on one side constantly contains a store of all the materials of interchange of matter, and that, indeed, in almost all degrees of transformation, yet, on the other hand, all the operations of the organism come under the connecting influence of the nervous system and its centres. This influence thus extends itself, not upon the magnitude of the physical operations alone, but also upon the amount and degree of the products of oxidation.

Hence we should consider, in the physiological, as well as pathological operations of the organs of labor, the lungs, liver, etc., for instance, not merely their specific or changed effects of motions and forms, but also the contemporaneous kind and quantity of the products of oxidation formed thereby; but we should consider, at the same time, also, as already said, that by reason of the various causes and conditions of a deficient influence of oxygen, those changed functions of the heart and lungs ensue; *a*, now centripetally; *b*, now centrifugally.

§. 306.

From the foregoing the following, for the present, announces itself regarding practice:

Concerning *a*. Such patients, though they generally come to the physician as adults, do not at all know that the number of their respirations, and the force, as well as number, of their pulsations (determined by examination), for a long time, in consequence of the causes above noted, could not have been in the proportion normal to the formation of their bodies; since, unconscious thereof, they chiefly complain of the most direct reciprocal effects of these functional changes of catarrh or cough, difficulty of breathing when going up stairs, etc., or of congestion and vertigo, unusually easy excitability or mental depression, loss of strength, obstruction, diarrhœa, so-called gouty pains in the head, in the face, in the neck, and in various re-

gions of the spinal column, of the ribs, in the arms, legs, fingers, toes, etc.

From neglect of these phenomena, which have usually been medically mal-treated for years, according to local pathological ideas and names, without result, we then meet with more deeply penetrating reciprocal effects thereof, such as the legion of hæmorrhoidal affections, with cirrhosis and other affections of the liver, as the results of a manner of living, depressing for a long time the interchange of matter, of the frequent use of coffee, or alcoholic drinks, or we meet with gout, developed in a like manner from the repressed influence of oxygen, in consequence of which tissues containing nitrogen are no longer oxidized to urea, but are excreted as uric acid; or torpid serophulosis, with deposits containing carbon and nitrogen, in consequence of poor nutrition, and living in an impure atmosphere; exanthemata with repressed excretion of carbon and nitrogen through the cutaneous surface; asthma siccum, emphysema, various diseases of the lungs, with hypertrophy of the heart, with dilatation of its cavities, on account of which the exchange of gases in the alveoli of the lungs is not properly accomplished, and the blood becomes poor in oxygen, but overladen with carbon. From such a structural change of the heart, follows afterwards a disease of the tension of the venous system, which makes itself especially felt in the urinary apparatus, leading to diseases thereof, and to dropsy, because, at the same time, there is a proportionate lowering of the tension of the arterial system connected therewith, etc. All these affections and diseases may extend their reciprocal action even to the brain and medulla oblongata, and spread their influence over these very organs themselves, as well as over various regions of the conducting nervous system, first irritating, afterwards paralyzing those parts, and thus producing hypochondria, anæsthesie, paralyzes, etc.

As regards *b*. Those changes in the functions of respiration and of the heart occur centrifugally, if, from previous onanism or other sexual excesses, from suppressed intermittents and other deeply penetrating diseases, as cholera, typhus, etc., or from long continued care, grief or sorrow, constant irritations of the brain and medulla oblongata, have developed themselves, sometimes also of the cervical sympathetic, or in the centre of the vagus, which irritations lead to idiopathic diseases of these parts, to hysteria and various spasmodic affections, to paralyzes, tabes dorsalis, epilepsy, etc.

That such irritations and disease-forms have an essential effect, even from the very outset, upon the respiration, upon the force and fre-

quency of the pulsations of the heart, and so alter these functions that the excretion of carbon and nitrogen is *restrained*, is well known.

Hence likewise we observe, as the first sign of diseases of this kind also (quite irrespective of the fact that in them the urine is wont to be pale and poor in chlorides and phosphates), the same irregularities in the functions of respiration and of the heart, followed, moreover, by reciprocal actions within the blood and the other laboring organs, the liver and kidneys, or the tendons and bones.

I call special attention here to a form of pulmonary catarrh with puriform expectoration and emaciation, which, upon the ground of a physical examination, in this case very deceptive, is almost always confounded with tuberculosis; it arises, however, from the previously weakened innervation of these organs, and can, at this stage, be easily cured by Sulphur or its preparations; while under a diagnosis which is directed merely according to the criteria of the physiological school, the disease is falsely named, consequently, falsely treated, and the patient must die.

I must also mention the appearance of the pains, and all sorts of ailments in the extreme periphery of the various nerve-centres. These pains, sometimes joined with swelling even, are not seldom taken for local rheumatism, and gout of the fingers, and toes, etc., and are treated in accordance with this name, without the least benefit; they belong, however, to the symptoms of an affection of the spinal marrow, already present, but still curable, though under any other than constitutional treatment, they are incurable and fatal.

Finally, to the diseases which are wont to arise from diminished influence of oxygen, we must add many of the zymotic forms, principally caused by the effect of specific substances of the outer world, which *directly* deprive particular parts of the organism in a specific manner of their oxygen.

From §. 19, it is shown that many ferments possess in a high degree a *reducing* power over the oxygen of the organism. To this category hence belong, chiefly, yellow fever, cholera, typhus, scarlatina, measles, dysentery, gangrene, and catarrhs.

We recognize, moreover, this carbo-nitrogenoid constitution most readily by the microscope. Here we observe an unusually large number of turbid, so-called, melanotic blood-cells, much sooner than, in the hydrogenoid constitutions, the appearance of numerous white blood-discs. The blood is richer in them on account of the suppressed progressive metamorphosis, which is possible only in consequence of an insufficient influence of oxygen upon the organic fluids and tissues.

A prick of the finger will supply a drop of blood, which, under the microscope, will give at once the requisite information upon this point.

The objections against Hahnemann's Psora-theory, I have refuted under the Nos. 1, 2, 3 and 4, under which latter figure also, the series of clinical cases belongs, beginning with §. 315; and since this work has at the same time to meet the demand to be a medical logic set forth by examples, I will point here to the fact that these refutations, separated by means of figures, have been made in accordance with the categories of quantity and quality, relation and modality. Whatever may be said against the mathematical speculative philosophy, only shows that our opponents have been entire strangers to these subjects. The practical significance of the entire principle of *categories* is based, however, upon this, that, therein the thought upon every object finds general supporting points, by the aid of which it is able to direct itself, and to exhaust the subject in all its relations. To this, of course, we may rejoin with the words of the poet: "*Nihil cogitantium jucundissima vita est.*"

Thus are presented not only changes of material, but also of nutritive and functional uniformities, partly in their primary, partly in their secondary appearance, which accompany and distinguish all these chronic diseases from their very origin, and from these diseases Hahnemann's entire list of psoric diseases may be taken. Whoever dislikes the designation "Psora" for these uniformities, let him choose another supported by exhaustive reasons; and until a general understanding thereof is gained, I provisionally abstract a designation from those material causes and conditions which, under the given circumstances, constitute that state of the body to which I have accordingly given the name of a carbo-nitrogenous.

The chronic diseases, which this bodily constitution renders possible, consist in *processes of retention*.

I scarcely deem it necessary, especially to remind the reader of the fact, that, from the foregoing, the necessity of an anamnesis as complete as possible becomes evident, provided it be desired to obtain a correct diagnosis, indication and prognosis; that in order to know and rightly judge a subject, we must know, before any investigation of the present state, how it has developed itself.

§. 307:

From all the researches thus far made within the theoretical and practical domains of Chemistry, Physics, etc., and from the Therapeutics of the present day, unhappily still in hostile opposition, though

really completing each other, there can be no longer any doubt regarding the actual existence of three distinct fundamental characters of general tissue- and blood-qualities, the so-called bodily constitutions, under which all other qualities yet to be found are to be arranged, and, upon the ground of therapeutic experiences, can be arranged.

Thus these three characters are distinguished in general, in the first case, by an *abnormal quantity* of water, chiefly in the blood; in the second case, by the *increased capacity for oxidation* of the organic constituents; in the third, by the *impeded reception of ozone*, and the favoring of a *predominant formation or retention of carbo-hydrogenoid substances* in the organism.

It has been demonstrated that these three fundamental characters of diseases, which must be arranged under the idea of *bodily constitutions*, are produced either by atmospheric-telluric influences, by retentions or by transfer, but it is no less certain that they may be transmitted from parents to children. However, the first and second of these fundamental characters are the least independent, as far as, for instance, the second may be developed most frequently from the first, although the possibility of a life-long stability must be acknowledged for all, and hence for the first also. Both may combine with the third and then form diseases by far the most resisting to art, and far more so than the combinations with drugs from traditional quantities.

That we see the first, and naturally, even the second of these fundamental characteristics arises from a so-called sycotic or syphilitic origin, this is so clearly demonstrated every day, in practice, that no fear of a mistake can be entertained on this point. But, whether the third can arise from the acarus poison, even at the present day, for this we lack exact experiences, because, in our day we have no longer any opportunity to observe the scabies in that intensity and to that extent, or followed by such results as obtained in Autenrieth's and Hahnemann's time.

We are, however, from this lack of observation, by no means justified in throwing away the experiences of such great observers without hesitation; for it would be erroneous to maintain that effects corresponding in form could not be produced by a single cause, for this is sufficiently demonstrated, among other things, by the Homœopathic law of similarity.

Hence, to these simple natural laws, the assumptions of older and more modern practical physicians regarding psoric, sycotic, leucæmic, and other forms or specific states reduce themselves, and their still vacillating Therapy may, at the same time, be corrected thereby.

Hence whoever would learn in the quickest possible manner the most general characteristics of the three various constitutions, needs only study the drug-provings of Copper, Iron, and Glauber's salts, and of the other drugs of these three series, mentioned here in general, provided he possesses that physiological and pathological knowledge which will enable him to translate the language of these drug-provings into the language of Physiology, Pathology, and Therapeutics. Jahr's *Materia Medica* probably may be the most suitable for this end, especially when the Supplements are published.

It is quite as impossible, as unnecessary, to attempt to give, by way of *description*, an insight into the characteristics of these bodily constitutions; this would ever be an unintelligible and rather confusing patch-work; for no individual bodily constitution is ever so clearly imprinted upon a condition relatively healthy, that its quality might be recognized without leaving any doubt. It is *only in diseases* that they become so conspicuous as to enable us to establish the synthetic comparison of the law of similarity with them. Hence the search of physiological medicine even, after distinguishing marks of various constitutions, was in vain; it employs for this purpose relative ideas without meaning, such as plethoric, leuco-phlegmatic constitutions, etc., which are without practical value.

In this connection I mention, moreover, the water cure, since it now can no longer seem strange why it should not be used either in the hydrogenoid or oxygenoid constitution.

I will also remind the reader of the galvanic stream, of electricity, which likewise can be used with success only under observation of these natural laws, if we would prevent a paralysis from terminating in a contraction, an observation which has both been pointed out and confirmed by Hahnemann's provings of the influence of electricity.

§. 308.

REMEDIES FOR THE BODILY CONSTITUTIONS.

In order to complete, what to many may not have become entirely clear, I group together those remedies which have approved themselves to me, as efficacious remedies, and, as I am pleased to see from our Homœopathic literature, to other skillful practitioners.

If it is true that there is a *hydrogenoid* constitution, then those substances must be curative to it which prevent the influence of the water upon the blood, and here, above all others, I reckon Glauber's salts. Its correct indication escaped Rademacher's adherents only because

they will not use a "fool's dose," §. 174, while the Glauber's salts in purgative, *i. e.*, in their normal dose, cannot manifest that effect.

Since, in this constitution, in which frequently hydrogen seems to have usurped the place of nitrogen, the problem is not only to diminish the influence of the hydrogen, but, where it is possible, to preserve at the same time the tissues rich in nitrogen, Glauber's salts recommends itself all the more, as Prof. Seegen has given experimental proof, that, by its action, the exchange of the nitrogenous tissue-elements is considerably curtailed, the animal body becomes richer in nitrogenous atoms, gelatine, and albuminous bodies, and that, during the use of the salts, the elements of the body, free from nitrogen, and especially the fatty tissues, are more freely exchanged.

If we know, further, that the alkalies essentially promote the operation of oxygen by means of the respiratory process, it is clear that, if we compare the various localizations of the pathological processes in these constitutions, and their specific forms, with the results of the Homœopathic drug-provings, that even Natr. nitr., Natr. carbon, Acetate of soda and Sal ammoniac, especially belong here. Moreover, in this series, we may mention as nutrition-remedies, Calc. carb., Magnes. carb., and phosph., Silicea, then, for other reasons adduced, Iodine, Bromine, Chlorine, Nitr. ac., Natr. mur., Borax, Antimony, Alum, Thuja, Carbo., Arnica, Aranea diad., Pulsatilla, Nux vomica with Ipecac or Arsenic in alternation, Conium, Apis, Spigelia and animal food.

That constitution, viz, the *carbo-nitrogenous*, which aside from a relative *lack of ozone*, is rich in nitrogen and carbon, and indicated by Rademacher as appropriate to the Copper series, finds in ozone or ozone water itself, its most powerful remedy. Here also belong all substances which expel carbon and nitrogen, and take up ozone or transfer it to others, and excite oxygen or stand in similar chemical or physical relation to it, viz, Copper, Phosph., Sulph., Camphor, Hepar sulph., Sul. ac., the Sulphur alkalies, Quicksilver, Gold, Silver, Lead, Platina, æthereal oils, Turpentine, Rhus., Dulcamara, Chamomilla, Lycop., Bovista, Bell., even Nux vom., but given alone, Digitalis, Hyoscyamus, Opium, Lobelia inflat.

That, finally, the bodily constitution, termed the oxygenoid, on account of too active an influence of oxygen upon the body, has to seek its remedies mainly in the Carbon and Nitrogen series, which prevent the oxidation of tissues, is self-evident. Rademacher here places Iron in the first rank. But, inasmuch as the Hydriodate of Potash absorbs all the ozone, I should much prefer it to Iron. Here the carbons and the alkaloids, rich in carbon, have a direct effect, as

Graphites, Petroleum, Kreosote, Benzoic acid, Citric acid, Acid hydrocyan., Laurocerasus, and, chiefly for inductive reasons, Antozone water, corresponding, indeed, to the iodosmone water; furthermore, Nitric acid; many so-called narcotics, especially Aconite; moreover China, Quinine, Arsenic, but given alone, and all the metals which are capable of suspending the process of decomposition, hence Chromium and Kali bichromicum.

However, for reasons obvious, the law of similarity must always decide the special indication.

The reasons why, even in the time of Cholera, ozone water was never once experimentally used by the rulers of the state medicine, and why ozone water, as little as antozone water, is to be found with the apothecaries, have been sufficiently indicated.

Regarding the therapeutics of diseases arising from hydrogenoid and oxygenoid basis, I would call attention to the contents of §§. 19 and 100; in the first case, to Guaiac tincture, and in the second, to Sal Ammoniac, which every nervous lady now-a-days always carries with her, at least in the form of English salts.

The species of collapse, first brought into notice by Wunderlich, a collapse which may occur in all diseases, and not merely in those of a consumptive nature, arises chiefly during the elevation of temperature, constantly preceding the former, by the influence of which every trace of Antozone in the organism is lost, but which, as is evident from previous paragraphs, is easily restored, and that with benefit, as long as any hope of a cure is left.

§. 309.

To every physician, to whom these subjects still appear strange, it may seem remarkable, above all things, that, among the remedies for the oxygenoid constitution, the carbo-hydrogenoid combinations of the æthereal oils are not found, or, that Sal Ammoniac is not also found among those for the hydrogenoid and oxygenoid constitutions; or that several substances, the solutions of Iron, for example, which absorb great quantities of nitrogen, belong to the oxygenoid, as well as to the hydrogenoid list.

Regarding these questions, the *dose is always decisive*. Even the followers of Rademacher acknowledge that remedies sometimes act only in a small dose, but they give no exact reason for this, which, however, should be discovered.

Thus, for instance, Nux vom. may be given with advantage in the lower attenuations, 3rd to 6th, in hydrogenoid constitutions, but in the carbo-nitrogenous only in the higher potencies, at least, the 30th.

That the important doctrine of the bodily constitutions has already taken deep root in the soil of Homœopathic practice, several articles in the *Allgem. Hom. Zeitung* show, and since these come from prominent homœopaths, they require mention in this text-book, so far as their contents pertain to this subject.

Dr. Ægidi presents, in Bd. 68, No. 7 of the *Allg. Hom. Zeitung*, an arrangement of remedies according to the various constitutions, which remedies I have already included in the above enumeration, so far as I have found these properties verified in my own practice. The rest can be found in the place just given.

Dr. H. Gross, in Barmen, thus expresses himself in the *Allg. Hom. Zeitung*, Bd. 68, No. 17:

“v. Grauvogl’s fundamental laws are declared unpractical by men of the most opposite views; by some, from dogmatic stubbornness; by others, because it seems inconvenient to them to make their previous arbitrary procedures dependent upon steadfast laws. If the latter knew how much labor would be spared them by Grauvogl’s works, they surely would study them in their own interest; for the constitutional fundamental characters alone make it possible to generalize, up to a certain degree, without becoming untrue to Homœopathy. As epidemic constitutions, they must be very important for judging and treating climatic diseases in all countries of the globe. They enable us to cure a complicated constitutional disease by a *single remedy*.

“In acute diseases, the *genius epidemicus* is to be ascertained. Here the carbo-nitrogenous and the oxygenoid constitutions can be very easily discerned; the hydrogenoid, with more difficulty, which, however, in recent times, appears more rarely; in order to recognize it, continuous meteorological observations undoubtedly offer the greatest aid.”

The much-esteemed author will permit me here to interpose the brief remark, that this assertion, as far as I can judge from my practice, does not hold good. Since the year 1859, that is, since, in Nuremberg, the Pegnitz became so low, on account of the continuous dry summer, that the bed of the river was visible, and the fishes perished, the hydrogenoid constitution has been especially developed on the banks of the river. This dryness seems to have been accompanied, in other places also, with the same causes and effects, since, even in France, complaints have been heard for a long time about the uncommonly frequent occurrence of intermittents, and, still more, about their so-called masked forms.

Dr. Gross proceeds:

“In chronic diseases, the *genius epidemicus* is, aided by the law of similarity, to be considered less than the individual constitutional character of the disease (dyscrasia) given. Rademacher has sometimes used test remedies, in order to learn the character of the disease, a manœuvre which could be permitted only to so great a talent for observation. We, Homœopathists, to whom the choice of the remedy is made easy by the *sim. sim.*, will scarcely be tempted to use a test remedy. On the other hand, we may occasionally avail ourselves, with benefit, of the therapeutic diagnosis *ex nocentibus*. When, for instance, a remedy, chosen according to the law of similarity, corresponding exclusively to *one particular* constitution, leaves the disease unchanged, or even aggravated, then the assumption is warranted, that the given disease excludes the pathological character in question, and hence belongs to one of the two other constitutions.

From these relations, it is clear, among other things, why syphilis (carbo-nitrogenoid mercurial constitution), so long as it has not assumed the character of sycosis, is aggravated by Iron (oxygenoid constitution) sea-bathing, and anti-phlogistic salts (hydrogenoid constitution), but not by Nitric acid; because this pertains not exclusively to the hydrogenoid, but also to the carbo-nitrogenoid constitution. These exclusive effects of some drugs militate against the possibility of a carbo-nitrogenoid and a hydrogenoid constitution being active, at the same time, in the same organism.

A body may be electro-positive to another body, and electro-negative to a third. Thus a drug may be similar, or related, as regards *one* side of its effects to a second, and, as regards another side of its effects, to a third body, totally different from the second.

The case is not very different with the relations of the remedies for the constitutions demonstrated by v. Grauvogl, since it happens, not seldom, that one and the same remedy belongs to two, and even three, of the classes. In the meantime, we need not fear that, by so relative a bearing, all benefit of these categories will be lost to practice. *The size of the dose often decides.*

There is a method of treating diseases of the heart, or chlorosis, which, by repeated small venesection, *quasi-homœopathically*, seeks to work upon the ambition of the organism, and to excite it to normal action and blood-making. In quite similar manner is the carbo-nitrogenoid constitution excited by carbo-hydrogenoid remedies, æthereal oils, etc., in *minimal* doses, to increased reception of oxygen; while the oxygenoid constitution, corresponding to Iron, requires the same carbo-hydrogenoid (and carbonic) remedies, in more material doses,

because they have to operate in this case, in a certain measure, as *contraria*.

Thus, it appears even that to the carbo-nitrogenoid constitution, ozone and all remedies which contain an acid, must be given in not too small doses, because they must supply, nutritively, the lacking oxygen.

The Nitrate of silver, in the high potencies, corresponds to the Nitrum class, but in the lower attenuations, to the class of Sulphur and Copper, from which latter it is, however, sufficiently distinguished by the character of deficient re-action, as well as by the influence of spirituous drinks, of the warmth of the bed, of the clothing, and the pressure of the clothes.

Arsenious acid belongs to all three classes, yet predominantly to the sycotic, (Ferrum, Nitrum); here, also, the law of the simile must help to guide us, and, among other things arising therefrom, the benefit becomes evident when drugs have been proved, not only in material doses, but also in the high potencies.

In the diseases of the Nitrum constitution, losses of fluids, hæmorrhage, etc., are well borne (addition of water badly borne) less in the Sulphur constitution, and least of all in that of Iron. If the latter is induced by the *genius epidemicus*, then we generally observe pure air with positive electricity, accelerated respiratory movements, crethism of the nervous system. The Iron constitution contrasts hence with that of Sulphur and Copper, but might easily be confounded with the constitution of Saltpetre, which also belongs to sycosis. The Saltpetre diseases, however, as already stated, are distinguished from the Iron diseases by the beneficial effect of the loss of water (or blood) which sometimes is manifested by thickening of some of the intestines (hydrates); sometimes in Saltpetre diseases even, we find, simultaneously, a predominance of venosity, which at once excludes the Iron constitution.

It seems to me somewhat venturesome to infer the hydrogenoid character of disease, from an œdema, since, with remedies of another character (Sulph. Puls. Ferr), œdema is likewise not infrequent.

It is very probable that every rapidly and radically curing simile corresponds at the same time to the constitutional character of the disease in question; yet, in the present state of our knowledge, we are not always conscious of it."

These are utterances, to the correctness of which I can testify, on the strength of many years' experience, and, for their confirmation, I have thought it useful to quote the concurring experience of a colleague.

Thus it happens, that one case of glandular disease, for example,

must be cured with Iodine, another with the Iodide of iron only; a third only with Iron, a fourth only with Natr. sulph; but, in the school, all these various forms, the same only to superficial and crude empiric observation, are considered as essentially the same, to the great injury of practice. In connection with that *ætiology*, the insight into the bodily constitutions supplies that *biology*, which prescribes to us the laws, according to which now this, and now that substance, must be exhibited in a given case as a remedy, and this insight we gain in the manner indicated.

§. 310.

While on the ground of theoretical and practical studies, I have referred to a material basis the three fundamental forms which Hahnemann found himself obliged to adopt in *connection* with his law of similarity, there exists still another reason of perception (*ratio cognoscendi*), for a further indication, aside from the indication according to the law of similarity, although confirmed thereby.

When, for instance, according to any therapeutic schema, §. 259, we give Mercurius in Syphilis, Thuja in Sycosis, Sulphur in Psora, in order to extinguish all these chronic diseases, we clearly proceed regarding the first step, no longer, as in the first days of Homœopathy, in accordance with the law of similarity alone, but according to this law in connection with recollections and experiences touching the necessary connection of cause and effect, just as Allopathists do in their expectation of similar cases. A difference lies, however, in this also, that *we* work with *qualitative* causalities only; that with the quality of Mercury we endeavor to remove the quality of syphilis according to the law of the reciprocal causalities, etc.; but not with quantitative causalities; that, for example, we do not attempt to treat a hyperæmia with corresponding *quantitative* depletions of blood; a hyperæmia of the liver with large doses of purgatives.

The category of indication has thus become changed, since it accommodates itself, to the relation of well-known material causes and conditions, and *presupposes* the confirmation according to the law of similarity. The very same holds good regarding the indication according to the bodily constitutions, or the three Hahnemannian fundamental forms of chronic diseases.

If we consider now those indications which Rademacher's school has established in its three specific states, or, epidemic constitutions, and which it has followed with success, we shall find precisely the same in our own school, with the single exception, that Rademacher's

school (as does the physiological) connects with its indications the idea, that war must be declared quantitatively against diseases, and, it is this circumstance which always stands in the way of its prosperity, because it wrests from its hands a number of the most brilliant successes, which it should also attain according to its own indications, if it would so regulate its dose, that its remedies might always produce a *constitutional* effect undisturbed; if it, in brief, would do justice to its indications with homœopathic doses.

In addition to this, the observation of Rademacher and his followers is correct, that a remedy often cannot be dispensed with for a long time together. Thus, for two whole years, I could accomplish nothing, without the Nitrate of Silver, in most pathological forms, and, it is only within a month, that this powerful effect of Argent. nitr. has passed away, and its indication has almost entirely disappeared in my practice. But why? Because the law of similarity and the conditions accompanying diseases according to Hahnemann, led me to the indication of Arg. nitr.; while now there is not a trace of it any longer to be observed. During that time there raged, here at least, epidemically even, the Typhus recurrens, commonly called "Genick krampf," (cramp in the neck), and the Arg. nitr. was in my hands the greatest remedy beyond comparison, with the use of which I lost but three out of thirty-nine *most severe* cases, not reckoning, of course, the two fatal cases which I was obliged to take from other hands, when they were past cure; a success which was quite incomprehensible to my opponents. §. 4, and so annoyed them that they descended even to public utterances of insults, ridiculous charges and calumnies, which, however, the sound sense of the public visited with a suitable verdict. It redounds also to the greatest honor of my friendly opponents in the homœopathic camp, that they endorsed, without further proof, these subjective views, *which do not contain the least scientific counter-proof* (vide, neue Zeitschrift für Hom. Klinik, July 1st, 1865), and I have long ago left it to their pleasure to declare, as they are wont to do, *a priori*, and *à tout prix*, all my labors useless and injurious, as long as it may please their skepticism and dogmatism.

Dr. Fischer observed, as appears from the last Transactions of the Central Verein of Homœopathic Physicians, that, in his practice in Basle, and vicinity, Copper and Nicotiana procured the most favorable results in typhus recurrens. Not only in view of §. 288, but also because such highly esteemed Homœopathists knew how theoretically to study and practically to profit by Rademacher's indications, I cannot well neglect to give a general *resumé* of the subject, for which, an extract from the work of Dr. Gottfried Latz upon the treatment of the

chief pathological forms, presents a suitable opportunity, even though it were *merely for the sake of the necessary comparison*.

I will only remark, that, according to his Terminology, the first specific state corresponds to the Natrum, the second to the Copper, the third to the Iron series, and refer also in this connection to §. 243.

§. 311.

DISEASES OF THE BRAIN.

“Under diseases of the brain and spinal marrow we understand such as have their seat, primarily, in these organs, or in their immediate vicinity, in such a manner as to exert a very considerable reflex influence upon the organs mentioned; consequently we reckon here such diseases even as do not receive, in the usual nomenclature, the name of disease of the brain or spinal marrow, and which are generally arranged under rheumatic, nervous and gastric affections.

I. If those diseases are pathological forms under which the first specific state appears, then of the remedies of the first series, Nitrum is especially indicated.

II. If they are pathological forms, under which the second specific state occurs, then, of the remedies of the second series, there are specially indicated:

1. Of the remedies in a more restricted sense, Cuprum, Tartar Emetic, Zinc, Arnica; Cuprum with Arnica; Tartar Emetic with Arnica.

2. Of the narcotics; Stramonium, Aqua amygdalarum amararum, Nicotiana—Opium.

3. Of the remedies in a more restricted sense in connection with narcotics: Cuprum with Opium, Cuprum with Stramonium, Cuprum with Aqua amygdalarum amararum, Cuprum with Tinctura nicotianæ, Ipecac with Stramonium and Opium, Zinc and Opium, Zinc with Stramonium.

4. The special excitants are here like the general excitants. As regards them, we have hence to refer to the exciting method.

III. If they are pathological forms under which the third specific state appears, then, of the remedies of the third list, we have specially indicated, Ferrum and Sulphuric acid. For the sake of brevity, we mention at the same time the transition remedies among those remedies to which they chiefly incline.

IV. If they are pathological forms under which the combination of the first and second specific state occurs, then, for simultaneously combating these states, we find indicated:

1. Of the combination of remedies of the first series with remedies of the second in a more restricted sense, Nitrum with Tartar emeticus, Nitrum with Arnica; Sal ammoniac with Tartar emetic.

2. Of the combination of remedies of the first series with narcotics. Nitrum with Stramonium, Nitrum with Aqua amygdalarum amararum.

V. If they are pathological forms under which the combination of the third and second specific states occur, then, for simultaneously combating these states, we find especially indicated:

1. Of the combination of remedies of the third series with remedies of the second series, in a more restricted sense: Ferrum with Arnica.

2. Of the combination of remedies of the third series with narcotics: Ferrum with Opium, Ferrum with Stramonium, Ferrum with Aqua amygdalarum amararum, Ferrum with Nicotiana, Ferrum with Stramonium and Opium.

3. Of the combination of remedies of the third series with excitants: Ferrum with Valerian, Ferrum with Camphor.

DISEASES OF THE SPINAL MARROW.

I. If they are pathological forms under which the first specific state occurs, then, of the remedies of the first series we have especially indicated, Nitrum.

II. If they are pathological forms under which the second specific state occurs, then, of the remedies of the second series we have especially indicated:

1. Of remedies in a more restricted sense: Cuprum, Tartarus emeticus, Turpentine.

2. Of narcotics: Aconite, Strychnia, Extract of Nux vomica, Aqua amygdalarum amararum, Opium.

3. Of the combination of remedies in a more restricted sense with narcotics: Cuprum with Opium, Cuprum with Aconite, Cuprum with Aqua amygdalarum amararum, Tartar emetic with Aconite, Tartar emetic with Aqua amygdalarum amararum, Tartar emetic with Opium, Ipecac with Aconite, Ipecac with Aconite and Opium.

III. If they are pathological forms under which the third specific state occurs, then, of the remedies of the third series, are specially indicated: Ferrum, Acid sulphur.

IV. If they are pathological forms, under which the combination of the first and second specific state occurs, then, for simultaneously combating these states, there is especially indicated:

1. Of the combination of remedies of the first series with remedies of the second series in a more restricted sense: Nitrum with Tartar emetic, Sal ammoniac with Tartar emetic.

2. Of the combination of remedies of the first series with narcotics: Nitrum with Aconite, Nitrum with Aq. amygd. amar.

3. Of the combination of the remedies of the first series with remedies of the second series in a more restricted sense, and narcotics: Nitrum with Tartar emetic and Aconite.

V. If they are pathological forms, under which the combination of the third and second specific state occurs, then, for simultaneously combating these states, are especially indicated:

1. Of the combination of remedies of the third series with remedies of the second, in a more exact sense: Ferrum with Turpentine. Ferrum with Ipecac.

2. Of the combination of remedies of the third series, with narcotics: Ferrum with Opium, Ferrum with Aconite, Ferrum with Extract of Nux vomica, Ferrum with Aq. amygd. amar., Ferrum with Aconite and Opium.

DISEASES OF THE PRINCIPAL NERVES PROCEEDING FROM THE BRAIN AND SPINAL MARROW.

As regards these diseases, the same holds good as was said touching diseases of the brain and spinal marrow.

DISEASES OF THE RESPIRATORY ORGANS.

I. If they are pathological forms under which the first specific state occurs, then the remedy which is chiefly indicated from the first series is, Sal ammoniac.

II. If they are pathological forms, under which the second specific state occurs, then, from the remedies of the second series, there are specially indicated:

1. Of the remedies in a more restricted sense: Tartar emetic. Sulphur auratum antimonii, Radix ipecacuanhæ, Rad. senegae, Myrrha, Sulphur.

2. Of the narcotics: Digitalis, Hyoscyamus.

3. Of the combination of remedies in a more restricted sense, with narcotics: Tartar emetic with Digitalis; Sulphur auratum with Digitalis, Sulph. aur. with Hyoscyamus; Tart. emet. with Hyos., Tart.

emet. with Opium; Ipecac with Digitalis, Ipecac with Opium, Ipecac with Digitalis and Opium.

4. Of the special excitants: Lobelia, Benzoic acid, Liquor ammoniaci succinici.

5. Of the combination of remedies in a more restricted sense, with special excitants: Ipecac with Lobelia; Sulphur aurat. with Benzoic acid; Senega with Liquor ammoniaci succinici.

III. If they are pathological forms, under which the third specific state occurs, then of the remedies of the third series, there is specially indicated: Ferrum.

The spiritus ferri chlorati æthereus is not borne by some patients, and, with such especially, increases the cough. Various bitter vegetables, as Tussilago, Marrubium and the like; Lichen islandicus.

IV. If they are pathological forms, under which the combination of the first and second specific state occurs, then, for simultaneously combating these states, there is especially indicated:

1. Of the combination of remedies of the first series with remedies of the second, in a more restricted sense, Sal ammoniac with Tartar emeticus, Sal ammoniac with Ipecac, Sal ammoniac with Senega.

2. Of the combination of the remedies of the first series, with narcotics, Sal ammoniac with Digitalis, Sal ammoniac with Hyoscyamus.

3. Of the combination of remedies of the first series with those of the second, in a more restricted sense, and narcotics, Sal ammoniac with Tartar emetic and Digitalis.

V. If they are pathological forms, under which the combination of the third and second specific state occurs, then for a simultaneous treatment of these states we have especially indicated:

1. Of the combination of remedies of the third series with those of the second, in a more restricted sense, Ferrum with Myrrh, Ferrum with Ipecac, Ferrum with Senega.

2. Of the combination of the remedies of the third series, with narcotics, Ferrum with Digitalis, Ferrum with Opium, Ferrum with Digitalis and Opium.

3. Of the combination of remedies of the third series, with special excitants, Ferrum with Lobelia, Ferrum with Benzoic acid, Ferrum with Liquor ammoniaci succinici.

It is especially to be remarked that with

DISEASES OF THE LARYNX,

which here accommodate themselves almost to all the remedies, Cuprum is to be mentioned, aside from the remedies of the second series in a more restricted sense.

DISEASES OF THE HEART.

I. If they are pathological forms under which the first specific state occurs, then the remedy of the first series especially indicated is, Nitrum.

II. If they are pathological forms under which the second specific state occurs, then of the remedies of the second series we have especially indicated:

1. Of the remedies in a more special sense, Tartar emetic.
2. Of the narcotics, Digitalis.
3. Of the combination of remedies in a special sense, with narcotics, Tart. emet. with Digitalis.

III. If they are pathological forms under which the third specific state occurs, then of the remedies of the third series there are especially indicated: Ferrum, Acid sulph, Acid phos.

IV. If they are pathological forms under which the combination of the first and second specific state occurs, then for treating both of these together we have especially indicated:

1. Of the combination of remedies of the first series with remedies of the second series, in a special sense, Nitrum with Tart. emet.
2. Of the combination of the remedies of the first series, with narcotics, Nitrum with Digitalis.

V. If they are pathological forms under which the combination of the third and second specific state occurs, then, for the simultaneous treatment of these states, there is especially indicated:

1. Of the combination of the remedies of the third series, with the remedies of the second in a special sense, Ferrum with Ipecac.
2. Of the combination of remedies of the third series with narcotics, Ferrum with Digitalis, Ferrum with Opium, Ferrum with Digitalis and Opium.

ANGINA MEMBRANACEA. ANGINA FAUCIUM ET PHARYNGEA.

I. If it is a pathological form under which the first specific state occurs, then of the remedies of the first series we have especially indicated, Nitrum, Sal ammoniac.

II. If it is a pathological form under which the second specific state occurs, then of the remedies of the second series, there is especially indicated:

1. Of the remedies in a more special sense, Tart. emet.
2. Of the narcotics, Opium.

III. If it is a pathological form under which the third specific state occurs, then, to meet both of the conditions at the same time, there are indicated of the remedies of the third series, Ferr. is especially indicated. If we desire a substitute for Iron, the vegetable astringents are indicated above all.

IV. If it is a pathological form under which the combination of the first and second specific state occurs, then, to meet both of these conditions at the same time, there are indicated: Nitrum with Tartar emetic, Sal ammoniac with Tart. emetic.

V. If it is a pathological form under which the combination of the second and third specific state occurs, then, to meet both of these at the same time, there are especially indicated:

1. Of the combination of remedies of the third series with remedies of the second, in a special sense, Ferrum with Ipecac.

2. Of the combination of remedies of the third series with Narcotics, Ferrum with Opium.

The treatment of *Mumps*, *Angina parotidea*, is the same.

DISEASES OF THE GASTRIC ORGANS.

A. Diseases of the Gastric Organs in which the Stomach suffers most prominently.

I. If they are pathological forms, under which the first specific state occurs, then, from the remedies of the first series, we have especially indicated: Natron carb., Kali acet., Natron acet.

II. If they are pathological forms under which the second specific state occurs, then, of the remedies of the second series we have especially indicated:

1. Of the remedies in a special sense, Magisterium Bismuthi, Magnesia, Carbonate of Lime, Magist. Bism. with Magnesia.

2. Of the narcotics, Tincture of Nux vomica, Bell., Opium, Tinct. of Nux vom. with Opium.

3. Of the special excitants, Ginger, Galangal root, Aromatic powder, Aromatic tincture, etc.

4. Of the combination of remedies in a special sense, with Narcotics, Magist. Bismuth. with Bell, Mag. Bism. with Opium.

5. Of the combination of remedies in a special sense with special excitants, Mag. Bism. with Magn. and Pulvis aromaticus.

III. If they are pathological forms under which the third specific state occurs, then, of the remedies of the third class there are especially indicated: Ferrum, Vegetable bitters with Centaury, Polygala, Trifolium, Absinthe, etc., Acid sulph., Acid phos.

IV. If they are pathological forms under which the combination of the first and second specific state occurs, then, to meet these states at the same time, there are specially indicated:

1. Of the combination of remedies of the first class with Narcotics, Natron carb. with Tinct. of Nux vom., Natron or Kali acet. with Tinct. of Nux vomica.

V. If they are pathological forms under which the combination of the second and third specific state occurs, then, to meet both of these at the same time, there are indicated, of the combination of remedies, *lege artis*:

1. Of the combination of drugs of the third class with Narcotics, Ferrum with Tincture of Nux vom., Ferrum with Bell., Absinthe with Tinct. of Nux vom., Ferrum with Opium.

2. Of the combination of remedies of the third class, with special excitants, Ferrum with Aromatic tincture.

B. Diseases of the Gastric Organs in which Diarrhœa is the most prominent symptom.

I. If they are pathological forms under which the first specific state occurs, then, of the remedies of the first class are specially indicated: Sal Ammoniac, Nitrum, Natron carbon.

II. If they are pathological forms under which the second specific state occurs, then of the remedies of the second class are specially indicated:

1. Of the remedies in a special sense, Ipecac, Plumb. acet., Aqua Calcis.

2. Of the narcotics, Opium.

3. Of the special excitants, Spices, as Cassia cinnamom.; Cinnam. acutum, Mace, etc.

4. Of the combination of remedies in a more special sense with narcotics, Ipecac with Opium; Plumbum. acet. with Opium.

5. Of the combination of remedies in a special sense with special excitants, Ipecac with Cassia cinnamomea; Plumb. acet. with Mace.

III. If they are pathological forms under which the third specific state occurs, then, of the remedies of the third class, are specially indicated: Rad. Columbo, Rad. Ratanhiæ, Kino, Catechu, etc.; Ferrum, Acid mur., Alumen, Red wine.

IV. If they are pathological forms under which the combination of the first and second specific state occurs, then, to meet these states simultaneously, there are specially indicated: Sal Ammoniac with Ipecac, Nitrum with Ipecac, Natron carb. with Ipecac.

V. If they are pathological forms under which the combination of the third and second specific state occurs, then, to meet these two conditions at the same time, we have especially indicated:

1. Of the combination of the remedies of the third class with remedies of the second class, in a special sense, Ferrum with Ipecac.

2. Of the combination of remedies of the third class with narcotics, Ferrum with Opium; Catechu with Opium; Columbo with Opium.

3. Of the combination of remedies of the third class with special excitants, Ferrum with Cassia cinnamomea; Kino with Cinnamonum acutum.

C. Diseases of the Gastric Organs, in which neither that condition given under A nor that under B exists.

- I. If they are pathological forms, under which the first state occurs, then, of the remedies of the first class, there are especially indicated, Natron carbon, Sal ammoniac.

- II. If they are pathological forms under which the second specific state occurs, then, of the remedies of the second class, there are especially indicated,

1. Of the remedies in a special sense, Magnesia, Carbonate of lime, Asafœtida, Turpentine.

2. Of the narcotics, Tincture of Nux vomica, Belladonna, Opium, Tincture of Nux vomica with Opium.

3. Of the special excitants, the Carminatives, (Anise, Fennel, Mint,) etc.

4. Of the combination of remedies in a special sense with narcotics, Tincture of Nux vomica with Asafœtida.

3. Of the combination of remedies in a special sense with special excitants, Asafœtida with Carminatives (for example, after the manner of the Aqua asafœtidæ composita).

- III. If they are pathological forms under which the third specific state occurs, then, of the remedies of the third class, there are especially indicated the vegetable bitters, as Trifolium, Centaureum, Absinthe, etc., Ferrum, Acid sulph., Acid phosph.

- IV. If they are pathological forms under which the combination of the first and second specific state occurs, then, to meet them both at the same time, we have indicated:

Of the combination of remedies of the first class with Narcotics, Natr carb. with Tincture of Nux vomica.

V. If they are pathological forms under which the combination of the third and second specific state occurs, then, to combat both of these states at the same time, of the compound remedies, we have indicated :

1. Of the combination of the remedies of the third class with those of the second in a special sense, Ferrum with Turpentine, Ferrum with Asafœtida.

2. Of the combination of remedies of the third class with Narcotics, Ferrum with Nux vom., Ferrum with Belladonna, Ferr. with Opium. Absinthe with Tincture of Nux vom.

3. The combination of remedies of the third class with special excitants takes place where we take as the solvent of a bitter extract, the distilled water of a carminative.

DISEASES OF THE KIDNEYS.

I. If they are pathological forms under which the first specific state occurs, then, of the remedies of the first class, there is especially indicated : Natron carb.

II. If they are pathological forms under which the second specific state occurs, then, of the remedies of the second class are specially indicated :

1. Of the remedies in a special sense, Aqua Calcariae, Turpentine, Balsam Copaivæ.

2. Of narcotics, Opium.

3. Of the special excitants, Cantharis, Coccionella.

III. If they are pathological forms under which the third specific states occurs, then, of the remedies of the third class, are especially indicated : Ferrum, Acid sulph, Acid phosph.

IV. If they are pathological forms under which the combination of the third and second specific state occurs, then, to combat both these conditions at the same time, by artistic combinations, there are especially indicated :

1. Of the combination of the remedies of the third class, with remedies of the second in a more special sense, Ferrum with Turpentine, Ferr. with Bals. Copaivæ.

2. Of the combination of remedies of the third class with narcotics, Ferrum with Opium.

DISEASES OF THE BLADDER.

I. If they are pathological forms under which the first specific state occurs, then of the remedies of the first class are specially indicated : Sal ammoniac, Nitrum.

II. If they are pathological forms under which the second specific state occurs, then of the remedies of the second class are especially indicated: Aqua calcis, Balsam copaivæ, Iodine, Cuprum.

III. If they are pathological forms under which the third specific state occurs, then of the remedies of the third class, Ferrum and Acid sulph. are especially indicated.

IV. If they are pathological forms under which the combination of the third and second specific state occurs, then to combat these two conditions, at the same time, Ferrum with Bals. copaivæ, Ferrum with Iodine are chiefly indicated.

GONORRHOEA.

I. If it is a pathological form under which the first specific state occurs, then of the remedies of the first class, Nitrum is especially indicated.

II. If it is a pathological form under which the second specific state occurs, then, of the second class the remedies especially indicated are:

1. Of the remedies in a special sense, Cuprum, Bals. copaivæ, Turpentine, Kali hydriodicum.

2. Of the narcotics, Tinct. of Nux vomica, Opium.

3. Of the combination of remedies in a special sense with narcotics, Cuprum, with Opium.

III. If it is a pathological form under which the third specific state occurs, then of the remedies of the third class, Ferrum is indicated.

IV. If it is a pathological form under which the combination of the third and second specific state occurs, then to combat these two states, at the same time, there are especially indicated:

1. Of the combination of the remedies of the third class, with remedies of the second class in a special sense, Ferrum with Balsam copaivæ, Ferrum with Turpentine, Ferrum with Iodine.

2. Of the combination of the remedies of the third class with narcotics, Ferrum, with Tinct. of Nux vomica, Ferrum with Opium.

DISEASES OF THE TESTES, NON-SYPHILITIC.

I. If they are pathological forms under which the first specific state occurs, then of the remedies of the first class, Nitrum is especially indicated.

II. If they are pathological forms under which the second specific state occurs, then of the remedies of the second class are especially indicated:

1. Of those in a special sense, Kalium iodatum, Iodine, Cuprum.
2. Of the narcotics, Opium.
3. Of the combination of remedies in a special sense with narcotics, Cuprum with Opium.

III. If they are pathological forms under which the third specific state occurs, then of the remedies of the third class, Ferrum is especially indicated.

IV. If they are pathological forms under which the third and second specific state are combined, then, to meet both these conditions at the same time, there are especially indicated

1. Of the combination of the remedies of the third class with those of the second in a special sense, Ferrum with Iodine.
2. Of the combination of remedies of the third class with narcotics, Ferrum with Opium.

NON-SYPHILITIC DISEASES OF THE FEMALE GENITALIA.

I. If they are pathological forms under which the first specific state occurs, then of the remedies of the first class, Borax and Nitrum are specially indicated.

II. If they are pathological forms under which the second specific state occurs, then, of medicines of the second class, there are especially indicated:

1. Of those of the second class in a special sense: Cuprum, Turpentine, Galbanum, Iodine; Cuprum with Galbanum.
2. Of narcotics: Crocus, Opium.
3. Of the special excitants: Castoreum.
4. Of the combination of remedies in the special sense, with narcotics: Cuprum with Opium.
5. Of the combination of remedies in the special sense, with special excitants: Galbanum with Castoreum.

III. If they are pathological forms under which the third specific state occurs, then, of the remedies of the third class, Ferrum and Acid sulph., are especially indicated.

IV. If they are pathological forms under which the combination of the third and second specific state occurs, then, to meet both these conditions at the same time, we have especially indicated:

1. Of the combination of remedies of the third class with those of the second, in a specific sense: Ferrum with Turpentine, Ferrum with Galbanum, Ferrum with Iodine.
2. Of the combination of remedies of the third class with narcotics: Ferrum with Crocus, Ferrum with Opium.

3. Of the combination of remedies of the third class with special excitants: Ferrum with Castoreum.

DISEASES OF THE OUTER SKIN AND OF THE SERO-FIBROUS MEMBRANES.

Under this rubric we comprehend the rheumatic and gouty affections and cutaneous eruptions.

A. Acute form.

I. If they are pathological forms under which the first specific state occurs, then, of the remedies of the first class, Nitrum and Sal ammoniac are specially indicated.

II. If they are pathological forms under which the second specific state occurs, then, of the remedies of the second class, are specially indicated:

1. Of the remedies in a special sense: Tart. emet., Cupr., Ipecac.
2. Of the narcotics: Aconite, Opium.
3. Of the combination of remedies in a special sense, with narcotics: Tart. emet. with Aconite, Tart. emet. with Opium; Cuprum with Aconite, Cuprum with Opium; Ipecac with Aconite, Ipecac with Aconite and Opium.

III. If they are pathological forms under which the third specific state occurs, then, of the remedies of the third class, Ferrum is especially indicated.

IV. If they are pathological forms under which the combination of the first and second specific state occurs, then, to combat both these conditions at the same time, we have specially indicated:

1. Of the combination of remedies of the first class with those of the second, in a special sense: Nitrum with Tart. emet.; Sal ammoniac with Tartar emetic.
2. Of the combination of remedies of the first class with narcotics: Nitrum with Aconite; Sal ammoniac with Aconite.

V. If they are pathological forms under which the combination of the third and second state occurs, then, to combat these conditions at the same time, we have specially indicated:

1. Of the combination of remedies of the third class with those of the second, in a special sense: Ferrum with Ipecac.
2. Of the combination of remedies of the third class with narcotics: Ferrum with Aconite, Ferrum with Opium, Ferrum with Aconite and Opium.

B. *Chronic forms.*

I. If they are pathological forms under which the second specific state occurs, then, of the remedies of the second class, there are especially indicated:

1. Of the remedies in a special sense: Cuprum, Kali iodatum, Iodine, Species lignorum, Antimony, especially Stibium sulphuratum nigrum levigatum, Mercurius, the compounds of Mercury with Antimony, Aqua calcis, Fowler's solution.

2. Of the combination of remedies in a special sense, with narcotics; Cuprum with Opium; Mercury with Opium.

II. If they are pathological forms under which the third specific state appears, then, of the remedies of the third class, Ferrum is specially indicated.

III. If they are pathological forms under which the combination of the third and second specific state appears, then, to combat these two conditions at one time, Ferrum with Iron is specially indicated.

N. B. The treatment detailed under A, is chiefly suitable for rheumatic-gouty affections; that under B, for chronic (dyscratic) diseases of the skin. One would seldom feel inclined to combat rheumatic-gouty affections with the energetic remedies given under B, although these remedies are suitable. By rheumatic-gouty affections we understand, however, the rheumatic-gouty diseases seated in the sero-fibrous membranes; the neuroses, strictly speaking, we do not bring into this category, and still less the vast number of diseases to which the attribute of "rheumatic or gouty" is ascribed, in order to designate these by their ætiological cause.

DISEASES OF THE NERVES.

These are partly diseases of the brain and spinal marrow, appearing under peculiar symptoms, and partly diseases of the principal nerves proceeding from the brain and spinal marrow, or, thirdly, diseases of separate organs and series of organs, with predominant affection of the animal sphere. These various species, however, frequently run into each other.

Nervous diseases are frequently periodical, and then we have often to deal with a two-fold evil, with the attack and the totality of the disease. Thus it is with Asthma, Epilepsy, etc.

In other cases the disease of the nerves sets in, in such a manner, as to appear in the sense of the former species, in form of an attack, but no second attack follows, so that, consequently, the attack at the

same time forms the totality of the disease. This is the case, for example, with Colic, Fainting, etc.

The treatment of diseases of the brain, of the spinal marrow and of the principal nerves proceeding therefrom, we have already learned. The peculiar symptoms, under which the first appear, according to circumstances, do not change the treatment in any way whatever.

The diseases of separate organs and series of organs with predominant affection of the animal sphere, are treated partly like other diseases of these organs, and series of organs, and, partly, like diseases of the brain and spinal marrow, accordingly as one or the other is more affected, and finally as a combination of the two.

The attacks are treated, partly with universal excitants, partly with large doses of special excitants, partly with Opium.

DISEASES OF THE BLOOD.

They seldom appear as isolated diseases, and generally go hand in hand with the diseases of organs, or series of organs, either arising therefrom or occasioning them.

The chronic diseases occasioning diseases of the blood are very frequently pathological forms under which the third specific state, or even the combination of the third and second specific state occurs. Upon the whole they have probably a general therapeutic relation to the plants of the family of the Cruciferæ, as is supposed to be the case, especially, as regards scurvy.

A. *Hæmorrhages.*

As regards the specific treatment, it makes, as a rule, no difference whether the disease sets in with a hæmorrhage or not. We treat cough with bloody expectoration, as a disease of the organs of respiration, vomiting of blood as a disease of the gastric organs, etc.

Regarding hæmorrhages, we have the indication sometimes to check them. Here, we use the remedies of the third class, and those which form the transition from the third to the second class. We can, in most cases, accomplish very much with Acid sulph., or the Acid sulph. cum opio, in large doses. The sequelæ of losses of blood are treated in the same manner as we treat the results of too copious venesections.

B. *Chlorosis and Amenorrhœa.*

In some cases these depend upon diseases of the genitalia; in other cases upon other diseases, as, for instance, gastric diseases. In still other cases, both these conditions obtain. The treatment is governed

according to the difference between these cases. In the first, we use remedies which correspond to the diseases of the genitalia; in the second, means which correspond to the concrete disease, to the gastric, for example; and, in the third, remedies which correspond to both.

C. *Hæmorrhoids.*

The usual hæmorrhoidal disease is a disease of the gastric organs, and is so to be treated. Deviating from the normal type, it develops also into diseases of other organs, as, for instance, of the lungs, the bladder, etc.

D. *Morbus maculosus Werlhoffii and Scurvy.*

These are generally pathological forms, under which either the third specific state, or the combination of the third and second state occurs. In the first case Iron and China are specially indicated; in the latter, Acids.

Against scurvy many plants from the family of the cruciferae are especially recommended, as, for example, Cochlearia, Sysimbrium, Thlaspi, etc. They have already been mentioned. I must now acknowledge that I do not exactly know under what remedies I shall bring them. Are they transition remedies from the third to the second class?

DROPSY

Is, in some cases, as regards the special curative method, symptomatic, *i. e.*, it accompanies other diseases, and disappears under their proper treatment. In other cases, however, it holds an independent position as regards the above-mentioned relation, *i. e.*, it does not disappear under the appropriate treatment of the disease with which it goes hand in hand; or again, no disease can be found of which it could be said that the dropsy had any symptomatic relation to it. As regards the first cases, we refer to the treatment of the concrete accompanying disease. As regards the latter cases, we can only state, in terms quite general, a few remedies.

I. If the dropsy is a pathological form under which the first specific state occurs, then of the remedies of the first class, Nitrum and Natron carb. are chiefly indicated.

II. If it is a pathological form under which the second specific state occurs, then of the remedies of the second class, Turpentine and Cuprum are chiefly indicated.

III. If it is a pathological form under which the third specific state occurs, then of the remedies of the third class we have especially indicated, Ferrum, Acid sulph.

IV. If it is a pathological form under which the combination of the third and second specific state occurs, then, for combating both these states at the same time, Ferrum and Turpentine are especially indicated.

HELMINTHIASIS (WORMS IN THE INTESTINAL CANAL.)

Anthelmintics, *i. e.*, such remedies as partly kill the worms directly, partly expel them, cannot be reckoned among the specific remedies. By means of the specific curative method, we only contend with those diseases which accompany the presence of the worms; sometimes, however, in this manner, we effect a radical cure. In the above-mentioned relation, we have to contend especially with gastric and nervous diseases.

SCROFULA.

Against *external* scrofula, the same remedies avail as against chronic eruptions on the skin. The treatment of *internal* scrofula depends upon the organs and series of organs affected; the treatment of the internal disease to which the scrofula has joined itself, is appropriate.

DISEASES OF THE BONES.

Their treatment is the same as that of the chronic eruptions.

SYPHILIS.

This presents a pathological form under which, as a rule, the second specific state appears; we find, therefore, indicated:

1. Of the remedies of the second class in a special sense, Mercury, Kalium iodatum, Cuprum, Species lignorum; the combination of Mercury with Antimony.

2. Of the combination of remedies in the third class in a special sense with narcotics, Cuprum with Opium, Mercury with Opium.

NERVOUS FEVER. FEBRIS NERVOSA, ASTHENICA.

If we define Synocha, as a potentized Synochus, we may, in an approximately similar manner, consider the febris nervosa, as a general rule at least, a depotentized synochus. There are natural nervous fevers and artificial. The former are the disease and plagues known as Lazaretto fever, typhus, putrid dysentery, putrid fever, etc. The latter are the products of medical art, or rather lack of art. They

arise from other fevers, if these fevers are improperly treated or neglected. These nervous fevers are by far the most frequent, and my experience has been confined chiefly to them. They appear sporadically, but may also very well appear epidemically where many individuals are exposed to the concrete medical art, or rather lack of art. Untimely emetics, purgatives, and venesections are ever active recruiting officers for such nervous-fever recruits.

If the nature of a concrete, depotentized synochus attaches to the nervous fever, the treatment of a synochus is also suitable for the nervous fever. If, on the other hand, the nature of a concrete synochus does not cleave to the nervous fever, then we must depend upon the principal topical phenomena accompanying the fever, and with regard to them, we must follow the treatment for those pathological forms of which they present the most prominent symptoms. For both cases, the following is to be particularly observed:

1. The nervous fever is seldom a pathological form under which either the first specific state by itself, or the combination of the first and second specific state occurs.

2. Of the remedies of the second class the special excitants are particularly indicated.

We will frequently have the opportunity, in the cure of nervous fevers, to abandon the specific method and select the exciting method. We frequently also have the opportunity to combine these two methods.

HECTIC FEVER. FEBRIS LENTA, HECTICA.

With regard to the fevers previously treated of, the fever, as such, accompanies acute topical diseases; here it accompanies chronic diseases. The febris lenta, as such, does not come up for treatment, but only the chronic disease which is accompanied by it. If we succeed in mastering this, the fever disappears of itself. The diarrhœa which so often associates itself with those diseases, which have developed into a hectic state, and which is generally considered as a characteristic symptom of hectic fever, is to be treated as any other diarrhœa. That it, in the most cases, however, presents no pathological form under which the first specific state occurs, is evident from the nature of the subject.

INTERMITTENT FEVER.

The treatment of fever and ague is in general divided into three parts:

- A. The suppression of the febrile attack.
- B. Treatment of the attack.
- C. Prevention of a return of the fever.

A. The Suppression of the Attack.

Intermittent fever, in its totality, is a pathological form under which the third specific state chiefly occurs. Very frequently, also, the second specific state is associated therewith, and, in such a manner, that the disease either presents a pathological form under which the combination of the third and second specific state occurs, or, a form in which these states are more isolated, yet near together, and hence the one following the other. In this latter case, indeed, instead of the second specific state, the combination of the first and second also occurs.

If the peculiar combination of the third and second specific state occurs, we can avail ourselves of the combination of the remedies of the first and second class.

But we can also proceed against each state by itself. In this latter case, we must, as a rule, attack the second specific state before the third. Frequently, both methods can be so combined that we commence with the attack upon the second specific state, and afterwards follow it up with combinations of remedies of the third and second class.

If the two specific states occur side by side, then we treat them separately. Here, also, the second specific state, as a rule, is to be treated first, and then the third.

If, in place of the second specific state, the combination of the first and second occurs, this combination is, generally, met with combinations of remedies of the first and second class; not till this has been accomplished is the treatment of the third specific state undertaken.

The remedies of the third class must be used in the apyrexia, before the attack, not during its course.

Not so very seldom the intermittent fever presents a pathological form under which the second specific state appears by itself. On the other hand, it rarely presents a pathological form under which the first pathological condition appears alone.

I. If the intermittent is a pathological form under which the second specific state appears, of the remedies of the second class there are especially indicated:

1. Of the remedies in a special sense: Tart. emet.; Sulphur auratum antimonii; Cuprum; Arsenic; Sulph. auratum with Carbonate of Lime.

2. Of the combination of remedies in a special sense with Narcotics: Tart. emet. with Opium; Cuprum with Opium.

II. If it is a pathological form under which the third specific state occurs, of the remedies of the third class, are especially indicated the China-Alkaloids, Quinine and Chinoidine. The many other remedies of the third class which are recommended are far inferior to these. However, they are by no means absolutely indispensable, as the medical world is unfortunately too much inclined to consider them: we mean in so far as they develop their efficacy as remedies of the third class. If one considers their efficacy against fever, in general, then truly, no other remedy whatever approaches them; but then, also, their secondary property falls very heavily in the balance. China-Alkaloids as febrifuges of the third class, and China-Alkaloids as febrifuges in general, *i. e.*, inclusive of their specific secondary properties, are two very different things. He who knows how to handle specific remedies needs them only in the first relation, and in the latter, but exceptionally. On the other hand, to him who does not know how to handle specific remedies, they must be welcome in any way whatever, let them operate as they may, since they are indispensable to him, by reason of their specific secondary properties.

III. If it is a pathological form under which the combination of the third and second specific state occurs, there are especially indicated:

1. The combination of the China-Alkaloids with some of the remedies noticed under I., such as Quinine with Sulphur auratum; Quinine with Cuprum; also the combination of the China-Alkaloids with Opium.

2. The combination of China-Alkaloids with such remedies as correspond to the chief phenomena presenting themselves during the paroxysm (*primo loco*) and the apyrexia (*secundo loco*). Hence, by way of example, where these chief phenomena are prevailing gastric, China-Alkaloids with Tincture of Nux vom., or with Belladonna, or with Magisterium Bismuthi, where they are prevailing cephalic, China-Alkaloids with Stramonium or with Zinc, etc.

IV. If it is a pathological form under which, on one hand, the third specific state, and on the other the combination of the first and second occurs, then, to meet these we must choose, of the combinations of remedies of the first and second series, such as correspond to the principal phenomena presented by the paroxysm and apyrexia. Thus we should, for example, where these phenomena were prevailing gastric, give Natr. Carbon, with Tincture of Nux vom.; where they are more cephalic, Nitrum with Stramonium, Nitrum with Aqua Amyg-

dal. amar.; where they are rather cephalico-gastric, Natron carb., with Stramon, Natron carb. with Aqua amygdal. Amar, etc.

V. If it is a pathological form under which the first specific state appears, of the remedies of the first class, Natr. carbon is chiefly to be recommended.

B. *Treatment of the Paroxysm.*

A treatment thereof, *per se*, is usually not necessary. If, however, it should become necessary, by reason of urgent symptoms, the treatment must correspond with that pathological form which the paroxysm represents.

C. *Prevention of a Return of the Paroxysm.*

In certain districts, and with certain occupations of the patients, this is a very difficult task.

If a remedy of the second class has checked the intermittent, then it is often advantageous to give Quinine afterwards, and *vice versa*, if Quinine or a China-Alkaloid compound has checked the fever, it is often very advantageous to give afterwards a remedy of the second class. In other cases, again, it is better to persist, for some time, in the use of a remedy which has given relief, or in the use of remedies from the same class or classes which have brought relief. If one pursues this course, then, when China has checked the paroxysm, we have to pursue the following course:

1. We persist, for a while, in the use of an efficient China-Alkaloid, or an efficient China-Alkaloid combination.

2. On the days on which the suspended fever may be expected to return, for the seventh, fourteenth, twenty-first time we give Quinine.

3. We give Iron.

4. We give Iron in combination with those remedies with which we have previously combined the China-Alkaloids, so far as the Art of Pharmacy does not forbid such a combination, in which case, in place of the selected remedy, we must use some analogue. For example, if we have previously given the China-Alkaloids with Stramonium, we should now give Ferrum with Stramonium; if we have previously given China-Alkaloids with Tinct. of Nux vom., we should now give Ferrum with Tinct. of Nux vom., etc. If the China-Alkaloids have been previously given with Zinc, the pharmaceutical art forbids to give Ferrum with Stramonium, or Ferrum with Aqua Amygdal. amar.

5. The previous course is followed, but we add, to the combination selected, a China-alkaloid. Thus we obtain such combinations as Ferrum, Chinoidin, and Tinct. of Nux vom., etc.

6. Iron is given with China-alkaloids.

7. Other remedies of the third class are given, as Trifolium, Absynth, etc., either alone or several in combination.

Note: Many, chiefly nervous diseases, take sometimes the intermittent type, and then, not seldom, yield to such a treatment as would be suitable for an actual intermittent."

§. 312.

It is true that the foregoing does not show an exact correspondence between Hahnemann's doctrine and Rademacher's; yet, so surprising a correspondence, that a union of the two systems must necessarily take place at some future day. As regards the Homœopathic school, it should now likewise establish, both by experience and demonstration, that often one remedy for a long time proves itself to be indicated and curative in the most varied pathological forms, and the reason why this has not as yet been acknowledged on all sides, must certainly be attributed to the circumstance that, but the smallest number of Homœopathsists consider it their duty to make a study of the concomitant circumstances, and generally deem Hahnemann's advice to pay especial attention to these concomitant circumstances, a mere caprice.

In short, it is clear that the study of the doctrines of these two *practical* physicians, though not belonging to any professorial guild, but accustomed to *think independently*, should be with the same earnestness recommended.

Let skepticism and dogmatism rise up against this, as it may seem good to them, for we can ever meet them with the undeniable truth, that in science there is no pope, and that the *right of free inquiry* is, and ever will be, its most sacred banner.

The whole of Rademacher's obscure indication is made clear in our so-called concomitant circumstances. What Rademacher must seek in the change of his so-called epidemic constitution, and at the cessation of the action of his remedies, *by accident only*, after various experiments upon the sick, this our law of similarity and the concomitant circumstances therein contained permits us to see, especially in the extent which I have above mentioned, and found confirmed in practice, for they enable us to cast the knowing glance of the diagnostician upon the character of the individual constitution.

Hence, Homœopathy, as a rule, can dispense with experiments upon the patients, nor need it have any fear of Rademacher's intercurrent diseases.

It may nevertheless happen that we are losing the bond of comparison between disease- and drug-forms in some cases, and that indeed, not infrequently, on account of the insufficiency of the former. If, then, the law of similarity can no longer enlighten us, for want of given causes and conditions, if we are not able to subordinate the phenomena to it and to use it as a clue, what then? Then we must be content, from the knowledge of the historic connection of events, to have in readiness a conclusion according to the expectation of similar cases, and to throw ourselves into the arms of empiricism, so long as experiment can give us no exact explanation touching the causal change of diseases according to time. That this will at some future time be the case, admits of no doubt; but, for the present, Rademacher's method alone helps us out of this dilemma, for which reason an example illustrating this subject may follow.

I was lately called to a man, 51 years of age, who only complained that, for the last three days, he had suffered from an increasing headache in the forehead, extending itself over the vertex and occiput, but having its chief seat in the temples. At the same time, he suffered with loss of appetite; besides these subjective phenomena, there were literally no objective phenomena of any pathological importance to be discovered. The patient had never been sick before, except that, six years ago, he had an attack of gout, which lasted seven weeks, and subsequently, in spite of medical aid, had disappeared spontaneously. He had not yet withdrawn from his occupation, that of a toy-maker, but now found himself unable to work any longer. The only thing noteworthy besides, was the circumstance that every day, at about 4 P. M., his headaches reached the highest pitch.

For the indication according to the law of similarity alone, too many elements were evidently lacking, to enable one to eliminate from it that which was contingent.

Under such circumstances, we are necessarily to consider that we ought never to forget to keep our eyes constantly upon the connection as to time, the connection of past events with the following; for only the quality of the general leads us with certainty to the quality of the particular.

It was just at the time at which the Typhus recurrens had hardly ceased to rage here, and with it disappeared in all diseases also the symptoms for which, according to the law of similarity, Argent. nitr. had to be given, which remedy had rendered me such brilliant results.

On the other hand, several pathological forms had already appeared, in which, according to the law of similarity, Copper was indicated.

Although now I did not have, in this case, according to the law of similarity, the least point of support to give Copper, yet, for the lack of every other clue, than that offered by the expectation of similar cases, I was obliged to prescribe it, and, on account of the organ affected, in alternation with Nicotiana. So Cuprum 6, and Nicotiana 3, were given through the day in hourly alternation.

Who, that has not had the same experience, so as to know that the result was not accidental, but the effect of the remedy, can imagine my astonishment, when, on the next day, all these insufferable pains had disappeared from his head, blown away as it were, or, as if they had never been, while, on the other hand, on the next day, after having taken each remedy twice, the Podagra announced itself on the right great toe by fever, swelling, injection and acute pains?

The patient now thought he should be content if he could leave his bed again in six or eight weeks. Under the continued use of these two remedies, the gout wandered the next day to the right ankle, the following day again to the right knee, causing sleepless nights on account of severe pain. A dose of Opium, on the fourth night, induced sleep, and under the continued use of Cuprum acet. and Nicotiana the patient was relieved of all his pains on the sixth day, and returned the next day to his work again.

No doubt this cure took place according to the principle of *sim. sim.*, but this principle alone did, for reasons mentioned, not lead with certainty to the right and indubitable indication.

Thus, to consider and judge diseases from a naturo-philosophical stand-point, in all their relations, §. 288, must be announced as the prime principle of every Therapeia!

How little consideration does the physiological school bestow upon such deeply-reaching reflections. Its Therapy is a plaything, the use of which one can teach every child in a very short time. A little physiology, a bit of Chemistry and Physies, and above all, its pathological Anatomy, constitute its whole knowledge, and with this glitter it garnishes its therapeutic impotence, and gains, though unjustly, honor, glory and praise from all its pupils, great and small, young and old.

One may well wonder why these *laws of chronic diseases* also, and their cure, were not known long ago, since chemistry, many years ago, discovered the four fundamental constituents, Hydrogen, Carbon, Nitrogen and Oxygen in the atmosphere, in which we bathe as in our vital element; these very constituents being at the same time the fun-

damental elements of all parts of our bodies, a fact from which, surely, the obvious conclusion presents itself, that, beyond a doubt, the so-called constitutional and hence general diseases, which are described as chronic, may often arise merely from a minus or plus of the four fundamental substances. In fact, this has often been felt instinctively; but the attempt to base pathology and therapeutics thereupon, has always proved a failure, because men find it so difficult to renounce doctrinal ideas once embraced, and supposed, even in this question, that, because Chemistry has discovered *four* fundamental substances, therefore there must be *four* fundamental forms of bodily constitutions, no more, no less, although practice was always found to contradict this supposition. This arises from the elasticity of the mind which has grown old prematurely, as is so often the case, and thus seeks to fetter practice by theory. This constrained method of thinking comes, however, from the hindrances which, in our day, are opposed to *free inquiry*, even in the domain of science, and which are maintained with all rigor, for even the mind can habituate itself to such rules as well as the body.

Those have been in all times the most honored, and will be handed down to posterity as the most celebrated, in whose career the protection of free scientific inquiry forms the brightest jewel. Now-a-days this seems to be no longer sufficient. Formerly we were told, "To every one his own." Now, almost every author makes good the assertion, "No right above mine;" and, although this motto may not be enforced by actual warfare, it is yet aimed at, according to the old maxim: "*Divide et impera.*" Hence, all the strife of medical parties is only a strife *pro domo*, and, in a scientific view, those cannot prosper who are ready to admit any other leading principles for the execution of theoretical investigations and practical experiments, than those of the eternal laws of nature. They struggle upon a soil upon which the truth is not born; hence not worth the contest. In every dispute there can be but ONE truth; this, however, cannot be found with leading principles which do not have the truth of a law of nature for their leader; for *only the law of nature is practical*. The substance of a practical perception, however, no individual can produce for himself, since the greatest part existed already before him. To strive onward now, as well as in the future, is commendable; but practice has developed itself within the confines of medical history. The life which we see before us on a small scale, is unrolled in its grand dimensions, and no experience of the past ought to be assaulted unless a compensation, equally great at least, is offered. This is so little acknowledged by the Ephemerides, that they make themselves merry

over the history of medicine. These Ephemerides can never comprehend how one could seek knowledge, light, freedom in other things, than those in which they seek it themselves. How high this ill-grounded radicalism thinks itself ascending with every step which it takes in any domain; how contemptuously it looks down upon the past, I have repeatedly had opportunity to show; but its acquisitions have remained null. Only under the guidance of the history of medicine, and as one keeps himself informed of the theoretical and practical efforts of each party, will he enjoy the pleasure of being able to separate the true from the false.

Prof. Bazin has lately been led, by his observations at the sick-bed, to reduce all chronic diseases to three *forms*, scrofula, gout, and syphilis, from which, he thinks, all other pathological forms originate. Thus, this idea of three fundamental forms does not cease, as yet, to occupy scholars; a proof that something of the kind must exist. Yet, they never get any farther than the idea, and no one considers that disease-forms are composite events, which can have no general basis, since they themselves have still to be reckoned among the specialities. As long as the medical mind is not sufficiently mature, to be able finally to turn away from such ideas, which do not offer any positive point of support whatever; as long as it does not comprehend that a higher, simple generality must lie at the bottom of all combinations; as long as the material elements of the combination remain disregarded, on account of imaginary nosological types, so long Homœopathy will enjoy no general recognition. Indeed, there still are Homœopathic physicians even, *i. e.*, physicians who appropriate to themselves that name, without comprehending its purport, who do not shrink from designating such ideas as rational. They lack the capacity of judgment, sufficiently developed; for they do not even know the circle within which Bazin and his follower, Pidoux, move.

§. 313.

THE EXAMINATION OF THE PATIENT.

In this text-book we have proceeded by the setting forth of experiences and facts, according to the course of the natural development of the human mind, first from the particular to find the general; then this general has been established, by which they are controlled; and now it is necessary, from this firmly established general, to return to the judgment of specialities in practice, in order to show how far they arise from, and find their explanation in, the general; for, before

we can think of a result at the sick-bed, we must know, from the general, *a priori*, what must happen; without this, there would be no diagnosis, no indication and no prognosis which were not the subject of doubt and contingency. How could I, by the observation of special cases, be able to comprehend all the changes to which they are subject, if I did not know, beforehand, what causes and conditions are necessary to their origin and disappearance?

The Homœopathic examination of the sick, as has become clear from the previous paragraphs, goes much further than that of the physiological school; for the latter, with all its physical, auscultatory, chemical, anamnestical inquiries, does not suffice for the establishment of a rational diagnosis, indication, and prognosis.

He who has not been instructed therein, can never make an exhaustive examination of a patient, and, to this I add the following words from the highly interesting essays of Dr. Bruckner, in Basle, (Allg. hom. Zeit'g, Bd. 71): "Such an examination, however, demands, above all other things, that the physician should have stored up in his memory all these characteristic constitutional symptoms, otherwise he will but too easily overlook them; at the same time, they can be found in our Repertories only with difficulty, or not at all. But every one who takes pains to cure, and, *lege artis*, to find the most appropriate remedy, has surely often enough convinced himself that, if he had not already committed to memory, the symptoms decisive in the choice of remedies, he most certainly forgot to inquire, more minutely, as regards those very moments, which would have been important, for the choice in a given case. For this reason, only those intimately acquainted with *Materia Medica* can be really successful practitioners."

As regards relapses, I must also call attention to other concomitant circumstances, which show that the examination of the patient must be often carried still further than the case in hand might seem to require.

To this I add a few examples such as occur daily, always in an isolated form too, and may be easily imitated.

For a cold in the head, as it is called, produced by an accidental chill, I have found Arsenic indicated for a long time, and have given it in the 30th decimal attenuation, with the directions to put ten or fifteen drops of it into half a pint of water, and to take a tablespoonful three or four times a day. The results were and thus far always have been the same. The cold in the head was entirely removed in twenty-four or at the most, in forty-eight hours. But I told the patients that as often as they were taken with cold in the head, with catarrh, they should pursue the same course at once. Now the further result is that they

have several times had catarrh with cold in the head, but every time less severe, and now they can expose themselves without harm to chills, even when their bodies are heated and perspiring. One of these patients, indeed, assured me that in his earlier years he had never experienced injurious results from such chills, and now, first, after thirty years, in consequence of this treatment, had again the same pleasurable sensation that his body would resist these injurious influences in such a degree as if he had become young again, while for a long time past he had been obliged to protect himself against every draught with the greatest care, since otherwise he experienced at once the premonitions of pneumonia, from which he had suffered twice; this was now no longer the case.

This inclination of the organism to take cold on slight exposures, belongs no less to the circumstances accompanying a disease, and must be removed.

In the so-called clergyman's disease, in the hoarseness of preachers and military officers, arising from long preaching and giving orders, I always order Arnica tincture, four or five drops in half a pint of water, a teaspoonful taken twice a day, with the directions to pursue the same course in case of a return of the disease. The result was quite as favorable as with the patients with cold, and was more highly valued, because, with this continued hoarseness, the pursuit of their calling was rendered almost impossible, for, upon every new attempt to preach or to command, the hoarseness of the voice just removed had returned again; every time after using the remedy, however, the hoarseness disappeared earlier than before, and now these gentlemen can preach and command louder and longer than before, and that without getting hoarse for a moment.

Now they are really to be declared and considered as cured, §§. 27, 288.

Thus in Homœopathy, we improve the constitutional deficiencies and *protect* against the influence of previous injurious influences, consequently also against the production of a host of subsequent diseases and against such as without improved constitutions, might have developed still further.

§. 314.

The task of Therapeutics thus far unfolded in many directions will now be made apparent by further practical examples. In so doing, it will be taught, at the same time, how the contents of the Homœopathic special Pathologies and Therapies, committed to us of late

through the excellent works of a Kafka and Baehr, may be used with profit according to the general principles of Homœopathy, for the skillful Homœopathist feels the need of the elaboration of special Pathologies and Therapies far less, since attempts of this kind, no matter how carefully prepared, will never be able to exhaust all specialities.

However, for the beginner, who, before he takes up the study of Homœopathy, must have passed through the studies of the university, and consequently is prepossessed with the dogma of physiological medicine, these works have accomplished all that lies within the realm of possibility; he will be spurred on by them always to seek, in them, the general, by which the specialities are conditioned; he will learn by them, that, in Homœopathy, all the knowledge can ever be found which every physician of every school needs, and besides this, moreover, a correct Therapy which every other school lacks.

This observation leads me to refer to a remarkable law of the human mind, which I think is nowhere fully discussed, but which nevertheless *for the knowing of one's self* is one of the most important conditions for the physician as regards the practice of his calling, and even for the management of a comprehensive examination of the patient.

There are, for instance, among us men born as analyzers, while others are born as synthetizers; and so much so, that we very rarely find these two modes of perception united in the same man; and yet, by this personal contrast, all the disputes in art and science are occasioned, consequently also, the individual capacity of comprehension.

The proclivities of the involuntary, *i. e.*, the born analyzers, can never be harmonized with those of the involuntary synthetizers, unless one or the other has become conscious that he is laboring under one or the other of these shortcomings peculiar to himself, which must induce him, if he is prudent, to strive with all his moral force to render more perfect his proclivity, by appropriating to himself the ideas of the other.

The analyzer cares only for details, and follows these into their very deepest depth, and, naturally, without ever finding the satisfaction desired; for him, there is no oneness, no point of rest, and the endlessness of detail expects of him and urges him to seek new opportunities for new investigations, from which he ever issues with the comfortless conviction, that he knows nothing yet, but has learned that he is farther from his goal than ever before; for the difficulties of arriving at truth have increased, with every discovery from experiment. For he only calls for perception, *ex post*, since only the sen-

sually perceptible object possesses for him validity, susceptible of proof. In this endeavor he discovers only new *predicates* belonging to objects; but all *connection* of these objects with others escapes him entirely.

The other, the involuntary synthetizer, likes best to draw his details from others, who occupy themselves with them. He finds within himself no great inclination to go into detail. On the contrary, he ever seeks for the whole, under which every detail is possible and necessary; he seeks after stable laws of nature for every particular, in order to subordinate them to these laws, and then learn how they are begotten and born. No speciality has for him any value, so long as he cannot connect it with the laws of the whole, of which every special case is a part, and explain it from these laws. Experience is to him only that perception by which he learns its necessary connection with other positive perceptions. Hence, he desires perceptions *a priori*, in order to form decisions upon every object before it is presented to his view; but this tendency often leads him to fruitless speculations, if he is not, at the same time, as earnest an analyzer. Hence, only with such a synthetizer who considers all events, and knows how methodically to change the circumstances of the experiment, it can have become a necessary want to complete his original tendency by that of the analyzer, and to comprehend and penetrate all subjects according to quantity, quality, relation, and modality; but never to the analyzer, who guided by his humor and the character of what he has accidentally learned, resigns himself to experiment, and remains an unconquerable empiric.

This distinction may also be considered as a definition of the present difference between Allopathy and Homœopathy. Decisions, *ex post*, and primitive experiments on the sick, characterize Allopathy or the so-called physiological medicine of the Universities; while Homœopathy never abandoned itself to primitive experiments upon the sick, but undertook experiments upon the well, and, by these, acquired laws, according to which all events at the sick-bed must occur just as it teaches, and no otherwise.

This uniting of Analysis and Synthesis, in the therapeutic procedures of Homœopathy, lends it its unimpregnable might.

Even in the first part of this Text-book, I have narrated several clinical cases out of my practice, but they all together do not teach how, in every single case, that generality is to be found, according to which they have terminated, because they were to avail only as examples for separate laws of Homœopathy: for it would detract from the usefulness of a text-book to confound the doctrine of the parts with that of the whole.

Hence all the clinical cases thus far presented, were to serve only for an explanation of the special laws of Homœopathy, and thus for practical confirmation. It is our object now also to show, by further practical examples, how, from the speciality of the single case, one can recognize the general laws, according to which it has been brought about, and to which we have to conform in our Therapeutics. This is the object of the examination of the patient.

Hence now only examples of the most varied forms of disease will follow, in order to show that they belong, nevertheless, to a single genus, that the examination of the patient presupposes the study of the homœopathic differential diagnosis, that of the accompanying circumstances, and that of the various bodily constitutions, and that this requires infinitely more knowledge than finds a home with the physiological school.

§. 315.

PRACTICAL EXAMPLES OF THE CARBO-NITRO-GENOID CONSTITUTION.

As in the clinical case, §. 265, so also in those which now follow, the symptoms which have been obtained *from provings with Argent. nitr.* upon the healthy, are given in *italics* for more convenient notice, in order that the beginner may the more readily learn practically the influence of the law of similarity upon the indication. Only the concomitant circumstances of the patient, which lead to the diagnosis of the bodily constitution are not indicated by *italic type*; that may be left to the beginner for his own instruction.

I choose here, as examples, no cures by Sulphur, but by a remedy, which, in its fundamental effects, is similar to Sulphur. Moreover, one of the constitutional effects of Sulphur is already practically set forth in the clinical case, in §. 251.

In the Index, I was obliged to indicate each one of these clinical cases by the name in use in the physiological school. Of course I set no value upon the name; but for the sake of reference, I was obliged to avail myself of this superficial means.

J. L., a police officer, fifty-four years old, complained that, for a year past, he could no longer satisfy his passion for hunting, because, when ascending a hill or upon moderately rapid motion, *he loses his breath*. He stated that he is a hæmorrhoidarius, had already taken many powders and pills, which relieved him, at most, for a day or two, and that now, his digestion is so impaired by having taken them

for years, that, for many months he has suffered from loss of appetite. Previously corpulent, he is now *emaciated*, and has *to complain of a constant anxious feeling in the region of the heart, periodical pains in the abdomen, tenesmus*, burning hæmorrhoidal tumors, and *urgency to urinate*. He was most alarmed by the frequent *vertigo* and *the weakness of the whole of the left side of his body*. He had a prematurely old look, *ashy-pale color of the skin, the tongue was coated white, the taste unpleasant, the region of the liver sensitive to pressure*, though no enlargement of the liver could be discovered. No blood or mucus was passed with the stools. Respiration 26; Pulse 108; *Palpitation of the heart*; no cough; the respiratory murmur scarcely audible in several places; only on the upper part of both lungs it was dry, vesicular and manifestly more acute. When requested to draw a deep breath, he did it without pain, but with so little elevation of the thorax, with so small a quantity of air being inspired, and without being able to keep his breath for any length of time, that it was clear that the capacity of the lungs was much diminished. *The hands trembled*; the sleep was short and he awoke often with *attacks of suffocation*. Discharge of wind upward or downward always brought relief. He lived very moderately and regularly as long as he could remember. Soup, meat, vegetables, milk, coffee and two glasses of beer a day were his food. He walked two hours every day in the open air, and never smoked.

The use of Coffee was forbidden, and Nux vom.² was provisionally given, once a day, for eight days, then set aside eight days, and so on.

Every eight days he thought he was feeling better, *i. e.*, only in general, for all his complaints still continued, though in a less degree.

Four weeks later, at 2 A. M., he had a violent attack of *asthma*, more violent than ever; according to his statement, in consequence of a cold; it was midsummer. Arsenic 10, two or three drops to be taken every two hours. After three hours, he was quiet again, but there was still violent palpitation and short respiration. Arsen. 10 once a day. After six days he returned to his occupation again, since his respiration had become easier.

Now I gave him, for reasons stated, Sulph. 30, in a single dose. A better sleep ensued, and more appetite, and he felt stronger. But after another four weeks he still had no *real inclination to work*; was also tormented with *anxiety*, although not so often with vertigo, yet with *confusion of the head and constipation*—the latter always aggravating all his complaints.

For the next six weeks everything remained much the same. But now he earnestly begged for something against the constipation; for after two or three days without an evacuation, there regularly returned again more *weariness*, and more *trembling of the hands*; then, also, more *sleeplessness* and *disgust for all labor*; heaviness and *stupefaction* in the head, especially the occiput; *eructation* and a *sense of constriction in the bowels, as if tightly girt about by a band*, which had chiefly set in since the last asthmatic attack. The *urgency to urinate* also set in more frequently, while he suffered from obstruction; the *palpitation* and *difficulty of breathing* increased, as well as the *sense of weakness of the left side of the body, and the left arm became then as heavy as lead*.

Thus Sulphur appeared not to have been indicated; the improvement was too trifling.

In view of the proving of the Carlsbad springs by Dr. Porges, I thought best to advise the patient to take, every morning, half a teaspoonful of Carlsbad salts, in half a pint of water.

This advice was followed for two weeks, when suddenly, for the first time, a hæmorrhoidal bleeding ensued, and that with great relief of all the complaints. It did not continue long, however. With the spontaneous cessation of these hæmorrhages, during which no remedy was taken, the previous ailments returned again. Thus I troubled myself with this man for over a year, and had to confess to myself that nothing worth mentioning had been accomplished, although the patient was content.

That here the blood-life was the first diseased, certainly will admit of no doubt, and quite as little that the insufficient nutrition of the nervous system, thence arising, produced, at last, the conditions which must arise from the change in the functions of the brain and spinal marrow thereby produced. This much is true, that, with this man, the whole interchange of substance was impeded by insufficient oxidation, and among those remedies which are able in any way to increase the influence of the oxygen upon the system, I found but one, which, at the same time, could be indicated according to the law of similarity even, viz.: Argent. nitric.

Just here, however, I add the observation that our patients, whether they take the *Arg. nitr.* by drops in spring water (for they have no distilled water) or whether they use pellets medicated with Arg. nitr. and then dissolved in spring water, never really take the Arg. nitr. into their blood, but only Chloride of Silver, and the higher the attenuations are, the more certain this is, because all spring water contains no small amount of Chloride of Soda. If a few drops of the second

or even of the third decimal attenuation are put into a spoonful of water, a white cloud of Chloride of silver is formed at once. How far this may go, is clear from the observation that, even the fourth decimal attenuation of Arg. nitr., an ounce of it, for instance, clearly presents in the light, a cast of reddish brown.

J. L. had now for eight days to take every night and morning four or five drops of Arg. nitr. of the second decimal attenuation, in a spoonful of water, for I like to prescribe this preparation of silver, because from it, as often as taken by the patient, the Chloride of silver will always be formed as an entirely fresh preparation.

The same, no doubt, has also occurred in the provings with Argent. nitr.

As J. L. presented himself again for examination after eight days, I was not a little surprised, on his entrance even, at the very decided change of the color of his face; (he was the first patient to whom I had given this prescription according to the above-mentioned indications); for his face had assumed again the incarnadine, pale red color of healthy men, and he himself declared, with beaming face, that he had never felt as well for more than twenty-five years as now. By this alone the proof was furnished that an evidently increased oxidation of the blood had taken place. Moreover, the pulse had sunken to 90, and the respiration to 22; proof enough of the increased capacity of the lungs, in accordance with which the patient drew a deeper breath, the thorax expanded more, and the expiration could be withheld for a longer time. But even the reciprocal actions thereof upon the nervous system were, at the same time, made manifest by the fact that quiet sleep was restored, often lasting for five or six hours during the night, and the feeling of a band compressing the abdomen, a sure sign of the affliction of the phrenic or diaphragmatic nerve, was no longer present. I now had him take no medicine for eight days, but, nevertheless, the improvement continued, since the stools became more regular and there was seldom any indication of vertigo. Without any further medication, of any account, the cure of this man continued from this time, and, for three months later; and even to the present time—three years—he has made no further complaints.

§. 316.

A blooming girl of nineteen, menstruating regularly, has suffered, for five years, without interruption, from *pressing pains over the whole head, sometimes only on the vertex, sometimes on the left frontal bone, which were relieved by firm pressure upon the suffering parts*, and

were ascribed to immoderate dancing in the evening, while the many physicians, whose advice was sought, had not been able to afford any relief whatever. Upon being questioned, the patient further states that she often suffers from *vertigo* and is *easily wearied*, while, at the same time, she *is losing her memory*. On going up stairs her *respiration is much hurried*, and she has *palpitation of the heart*. *The tongue is coated white*. Appetite and sleep are very good, but she is too *sleepy* during the day; *pains in the stomach* here and there, frequently for weeks at a time, *with nausea and vomiting even*. On feeling the pulse, I noticed *a trembling of the hands*; pulse 98; *a burning feeling in the region of the heart*. She can breathe pretty deeply without pain, but *cannot retain the breath long*, and on breathing, only vesicular respiration can be heard, yet there is no cough. The urine is pale and poor in solid constituents. There was nothing more to be learned.

A Homœopathic Therapeia expresses itself thus: "If one compares the declarations of the patients regarding the kind, seat, peculiarities, etc., of the pains ever so carefully, yet he will not hit upon the right remedy, because one is thus compelled to treat his patients only according to their subjective views." That may hold good for the analytic method of examining a patient, which, unhappily, obtains, in the Homœopathic school, and is followed in the physiological school almost universally. But the patient has no longer any opinions when one takes the trouble to go to work synthetically also, and to investigate the accompanying conditions.

This girl, after the fourth dose of Argent.nitr. 2, was relieved of all her headaches, and could afterwards breathe much easier; her palpitation was relieved also, and her memory returned in full force, for which an interval of five days only was necessary.

§. 317.

A woman 37 years of age, of a lively temperament and healthy appearance, who was married and had given birth to one child, and recovered well from her labor, had suffered during the last three years, without any known cause, from attacks of so-called nephritic colic recurring periodically every three months. Attempts were made every time to relieve the great pains which were connected therewith, by the application of leeches to the region of the kidneys on both sides, and by use of purgatives, and, only after the patient was reduced to the last degree by this treatment, the pains gradually remitted.

On account of her change of residence I was called to see her in her last attack, and found her in the *most acute pains in the region of both kidneys, the pains extending down the ureters to the bladder*; she was lying motionless upon her back, since every motion of her body caused her inexpressible pain, and touching the region of the kidneys increased these pains at once to the highest degree. She perspired freely; pulse 130; she sought, by frequent and short breathing, to avoid deep inspiration, for this increased her pains insufferably. The urine *contained blood, was scanty; passed often but only a little at a time and by drops*; it contained a visible sediment of crystallized uric acid and pus, with amorphous, gravelly concretions, some as large as half a lentil, and the acid fluid, which was found above the sediment, gave a deposit when heated with Nitric acid. Thus I had a case of so-called calculous pyelitis before me. She begged for the application of leeches, which she had ready at hand, since, previously, she had always experienced some relief from them; but, nevertheless, she was afraid to turn upon her face, a manœuvre necessary in order to apply them." For this very reason I requested her to abstain from the use of the leeches, but she only consented on the condition that I would promise her certain relief of the frightful pains as quickly in some other mode and manner. I could promise her this, when I prescribed Arg. nitr. 2nd dec.—45 drops, to be taken every hour.

When I saw her again, after six hours, she was very grateful to me for such prompt relief, and so easily accomplished; for, a quarter of an hour after she had taken the first drops she felt greater relief from her pains than was previously the case under the use of the leeches. She was able to urinate, at once, without hindrance, and more copiously, and she was already lying without pain, yet motionless, because the least motion renewed her pains again; on this account she restrained the urine as long as possible; this had been impossible before, but was now accomplished with ease.

Her husband was, if possible, still more pleased, as he had expected to have a fearful night. When I visited her next morning the pulse was 80 again, and she breathed as when in health. After eight days no more uric acid crystals were passed, but only small concretions. She showed me one of the size of a lentil, which she had passed without pain, and that was the last sign of her disease which had lasted three years.

For the sake of curiosity, I had taken some of the urine on the first day for further examination. Besides what has been already mentioned, it contained no trace of triple phosphates, but the well known

epithelia of the mucous membrane of the pelvis of the kidneys. Hence the pus could not have come from the bladder.

Thus the *Arg. nitr.* not only rendered superfluous all the symptomatic indications of the physiological school, the blood lettings, the plasters, the opiates, the Chloroform, the Turpentine, the Balsam of copaivæ, the Tannin, and the so-called styptics, which had been lavished in previous attacks, but the patient was also delivered from the hopeless uncertainty regarding the expected result of these problematic allopathic experiments, as sure as of the torments of an endless convalescence necessarily following such mis-treatment even in the most favorable cases, a convalescence that may very easily develop into an incurable affection and fatal sequelæ. Three years have now passed without any relapse.

§. 318.

A woman 29 years of age was thought, when yet a girl of 15, on occasion of a pneumonia, which she had at that time, to be consumptive and tuberculous, on account of her brilliant eyes, white teeth, white transparent skin, and because absorption of the exudation did not take place, in connection with the cough which still continued and the puriform expectoration. Cough and expectoration, however, disappeared spontaneously in the course of a year.

The patient continued apparently well till she married, in her twenty-first year, and had a miscarriage. From that time forward, all sorts of troubles broke upon her; at one time anomalies of menstruation; at another pains in the ovaries; now spasmodic cough, palpitation of the heart, and symptoms of so-called anæmia. All these, however, were transient, and no medical aid was called in.

Four years after that miscarriage, she sought my advice on account of hoarseness, which had then already lasted five weeks. A suspicious fluor albus was connected with this, and I gave her *Natr. sulph.* to be taken every three hours. The result was really remarkable, since, even on the second day, there was but little of the hoarseness left, and on the third none at all. The fluor albus also was diminished, and after a fortnight, ceased entirely.

Half a year later, she called me in haste on account of a spasm of the chest.

It was a common dry asthma. On the lower part of the left side, where she had felt the stitches during her former pneumonia, the sound on percussion was dull, and no respiratory murmur could be heard. On the upper border of this spot, there was a distinct fine

crepitating mucous rattle. Drawing a deep breath gave pain in this part, which was also marked by bronchophony. The middle and upper portions of this lung, as well as the entire right lung, were sound. The cause of all this was a violent mental emotion.

This woman had but little color in her face and pale lips. She was not much emaciated, but well formed and slender; had no phthisical habits; good appetite and sleep. The menses have been regular for a long time; rather too copious, and sometimes were followed, for a day or two, by a mild fluor albus. Her parents, still living, are quite healthy. After an attack of asthma, which lasted half an hour, her pulse stood at 90; her respiration I counted at 21. For eight days I directed one dose of Phosph. 6th. to be taken every day.

Called to see her about a year later. I found her suffering again with a violent attack of asthma. Her complaints were confined merely to want of air and fear of suffocation. Her condition was substantially as before, and she had been quite well, except a few slight spasms in the chest; Phosph. as above. The spasms of the chest ceased, but a great weakness remained, lasting for several days, and she remarked that *her whole left side, especially, was of but little use to her*. Objectively, there was no anæsthesia to be discovered. She confessed that *she became angry very easily*, whereupon she always *had to endure, for many days, stitching pains in the affected parts of the chest*. I recommended her, after every such mental emotion, to take Aconite a few times.

A few weeks after, *hoarseness* again. Nothing was discovered by the laryngoscope. After using Aconite every hour for three days, profuse sweat set in, during which the hoarseness, which she supposed originated from a cold taken when washing, ceased.

Six months later, having been living for a year near the water, she had a *quotidian fever* in the autumn, with increase of the stitches in the side, and with cough during the paroxysm. Both disappeared always with the sweat. Nux vomica and Ipecac put an end to these attacks in three days; yet only temporarily, for the next summer she suffered a relapse; but now, with expectoration which *was clearly puriform, and which was mixed with light blood*. Chinin. sulph. 3, removed all these symptoms in ten days. It was remarkable that the stitches in the side, the cough and expectoration, at each time, lasted only so long as the paroxysm of the intermittent, and that, during this time, from that part of the left lung originally diseased, there was a coarse crepitant râle, extending to the large bronchi, manifest upon auscultation.

However, as often as she got angry, the chills returned again, as well as the stitches in the side, with cough, and expectoration mixed with blood.

The patient could never be persuaded to take care of herself for any length of time, nor would she stay in bed except during the paroxysms of intermittents; and since these attacks of cough produced by passion were not seldom accompanied with *vomiting* also, I gave her Tart. emet. 3rd, which always gave her prompt relief and deliverance from her sufferings; but they always returned again from the same cause.

Another half year probably had passed, when this woman, in consequence of straining her eyes while sewing, was taken with *conjunctivitis*, with severe *photophobia*. Beside, I noticed that *the left upper eye lid fell further over the bulb than the right*. The pupil of this eye was contracted, and reacted less against the light. On inquiry, she said that she had often noticed this before, but it always passed off again of itself, as well as the *weakness of sight*, which she had sometimes noticed in this eye when working. As for the rest, the sight of the other eye was very good, suffering neither from near nor far-sightedness. But in the twilight, or under a clouded sky, she remarked reading or sewing was very difficult for her, because *a cloud was always hanging before the left eye*. The use of the ophthalmoscope was prevented on account of the pain which the light produced; yet I could observe no haziness of the media. At this time it occurred to me that this woman had lately *lost her strength very much*, without, however, losing flesh. Her declaration that she felt *much worse in rest than when walking in the open air*, where she could forget her acknowledged loss of strength, until she was obliged to go up stairs again, which for several years past had almost put her out of breath, was a striking proof that there was increased need of oxidation of the blood; and, on examination of the thorax, it was found that the vesicular respiration in all movable parts of the chest was more acute, and that the sound on percussion had become very clear.

Even recently, an attempt has been made in Homœopathic circles, to teach "that we should seek to act upon that part of the nervous system, which, for the case in hand, is the bearer of reaction." This is, however, for me, inexplicable, as far as the case in hand is concerned, without a general rule to direct me as regards the choice of the remedy, by means of drug-provings. What drug disease is there "which would be similar to this case, or the most similar, in order to gain the upperhand over the organic power of reaction probably too weak, and thus to make the disease disappear?"

I confess, without fear, that I am incompetent to find an indication here according to this special rule.

In the last sickness of this woman, I was led, it is true, by a symptom from the domain of the nervous system, to Argent nitr., viz., by the affection of the left eye.

But, as the patient had, for two days, taken Arg. nitr., second decimal attenuation, night and morning, she was taken with *such a weakness in all her limbs*, that she, and this was saying very much for her, was obliged to go to bed, where she frequently fell into a *soporose condition* with yawning, and a *cold shudder over the whole body*, and *lost all her appetite*. On the other hand, the left eyelid was as much elevated again as the right; the pupils in both eyes were equally dilated, and the stitching pains in the left side of the chest had disappeared. Without taking any more Arg. nitr., after two days, all these drug-symptoms had disappeared; the curative effects, however, remained, and simultaneously a marked diminution of the cough took place, although the sound on percussion had not changed till now, after the lapse of three years, and the crepitant râle could only be partially heard upon a very deep inspiration. This woman, since that time, has engaged in her occupation without interruption, and considers herself quite well, and, with this opinion, her perfectly healthy appearance corresponds.

Whether this will be permanent, I cannot, of course, decide as yet; so much, however, is sure, that, from her previous hydrogenoid constitution, a carbo-nitrogenoid constitution had developed itself in consequence of the medical treatment, and that the latter also is on the way to improvement; for the pulse even has fallen to 70 beats.

This conclusion was written three years before the present publication of this case, and, as the patient has remained perfectly well since that time, the cure seems really to have been permanent.

§. 319.

A president of a country court, forty-five years of age, came to me for a frequent *cough*, which was often so violent that he *lost his breath*, and for *difficulty of breathing*, after somewhat rapid walking, by which his face was congested. His face was uniformly pale, with pale lips; *white coated tongue*; pulse 116; violent *palpitation of the heart*; besides, he complained also of increasing *emaciation*.

While auscultating him, I observed, to my no small surprise, that, upon every inspiration, the upper part of the abdominal wall drew in, instead of expanding; while expiring, on the other hand, it

expanded instead of receding. The number of respirations was 21. The inspiration, which was, at the same time, short, warranted the conclusion that there was a marked diminution of the capacity of the lungs, yet the respiratory murmur was to be heard in all parts of the lungs, and no nutritive change of the organs of the chest could be discovered. Only in the large bronchi there was a fine crepitant mucous râle to be heard. The effort to breathe deeply took away the patient's breath at once. All this not only warranted the certain diagnosis of *paralysis of the diaphragm*, but also of a depressed innervation of the organs of the chest. As I requested him now to walk with his eyes shut, he was taken with *vertigo*; he staggered sensibly at the third step; at the fourth he had to open his eyes quickly in order to seize some object, and keep himself up, otherwise he would have fallen to the floor.

This circumstance, quite unexpected to him, now alarmed him much, yet he was quieted by my assurance that he should be perfectly cured.

Thus the cause of all his troubles lay in the organ of the centre of co-ordination, the medulla oblongata. (Duchenne's Locomotor ataxy.)

I ordered him Argent nitr. 2d dec. 5 drops, to be taken night and morning.

Surprising as it was, I did not hear any more from this man for months, when, quite unexpectedly, he came to me again to request my advice for his wife. But how his appearance had changed! He had gained fat red cheeks, a perfectly healthy color, with an evident increase of his whole body; he spoke with such a long breath, something impossible to him before, that I was not a little surprised at his silence regarding his restoration to health. At last I could not but ask him how he had been since he left me after the first visit. He replied that after he had taken that little vial, with the drops, all his former complaints had left him; he shut his eyes, and, in confirmation of his statement, went up and down in the room, without the least staggering. I much wish Dr. Eisenmann had seen this case, for he could not have denied that it was a case of locomotor ataxy in a high degree, nor that its cure was perfect; he might have learned, too, that the Argent nitr., where it is homœopathically indicated, truly, and without any doubt, produces a certain cure.

§. 320.

An ecclesiastic, married, a man of learning, sociable and highly esteemed in every respect, had been, for five years, *melancholy*. He

was then 51 years of age; had suffered since his 38th year with hæmorrhoids which bled every four weeks almost regularly. At the same time he was corpulent; yet, on account of an intermittent fever, which had been removed, several years before, with Quinine, his liver seemed to have been disturbed still more in its functions, since, from time to time, his skin had presented a yellowish tinge. Except this, he was never sick, although, as a child, he had had scarlatina and measles. He attributed his hæmorrhoids to his sedentary and studious mode of living. His melancholy he ascribed to an undeserved slight which he met some five years before. This mental depression soon increased till it became the fixed idea that he was neglected and despised by his family. *His calling became indifferent to him*; he performed its duties, as he said, only mechanically. This man, formerly corpulent, *wasted away from year to year*; he became *insensible to all social pleasures and lost all desire for labor*. Finally *he gave himself up to the distressing idea that all his undertakings would and must fail*.

When visiting me two years ago, he complained, in addition to the above, of constant *drowsiness by day* and of constant *sleeplessness the whole night through*; of *weakness of memory*, which frequently did not allow him to find the right word, *confusion of the head*, *want of appetite*, *trembling of the limbs*, which could also be seen; of obstruction alternating with diarrhœa, while the previous hæmorrhoidal bleedings had ceased, although the tumors, which remained, annoyed him very much; moreover, of *lassitude and weariness of the fore-arms and the legs*, and what alarmed him most were frequent *congestions to the head*, a pulsation in various parts of the body, which appeared, however, as jerking of the muscles, and a constant *chilliness*. Against whatever I proposed to him he had the queerest objections. His respirations were 20; his pulse 80-84. I finally gave him Nux 6, to be taken once a day, till better.

For a whole year, I heard nothing more from him. He was sent to a Water-cure, and came back much more miserable than he went, in every respect. Afterwards I was informed that he could no longer perform his duties; for this reason a vicar had to be appointed. He refused to take food, because, as he said, a man who does not work should not eat; however, while driven by hunger, he sought in secret to procure himself food. He spent the most of the time in bed, and, when up, it was necessary to use every means to keep him from meeting any one, for then he wept and assured every one that he was lost beyond hope for this world, that no one could delude him in that

respect, and no one could reason him out of it. His *weariness and depression* had also reached the highest point.

I desired to examine him personally. What an earth-colored, emaciated, wretched form of melancholy! Stooping over he staggered when walking, despaired of help from himself or others, constantly complained of *vertigo*, and was utterly bereft of all power of will. The ends of his fingers had become numb, and his *incessant mental distress* was accompanied with 28 respirations and 88 pulsations to the minute. I had hardly exchanged a few words with him when he fell asleep, but through the night he did not close an eye; now he complained of *pain in the back too—drawings in the shoulders; he still had constipation alternating with diarrhœa, chilliness, with cold hands and feet.*

That the sexual system is the most probable point of departure of hypochondria, as has been recently taught, is not true, at least as far as this case goes; for, not only according to the assertion of the patient, but also according to that of one of his fellow students, he had never suffered in this sphere. He begat none but healthy and vigorous children. His parents attained an advanced old age.

But an "immaterial" hypochondria is found as little as any other immaterial disease, and if one blots out of Homœopathy the indications of Psora, "then it is surely enough impossible, even approximately, to mark out a constant treatment according to the maxims of Homœopathy."

This case, without doubt, was the result of primary carbonization of the blood, which, not removed, but constantly increasing, had already extended its reciprocal action upon the brain and spinal marrow, and that with such an intensity that nothing more could be expected from Sulphur. On the other hand, the phenomena were so similar to those of the provings of Arg. nitr, or rather of the Chloride of silver, that I let the patient take four or five drops of the 2nd dec. every night and morning. For three days nothing had occurred that I could have attributed to Arg. nitr. The sleeplessness at night, his fixed ideas, etc., pursued him unremittingly, and made him still more desponding because, in the drowsiness during the day, which increased at the same time, he thought he had to recognize an aggravation of his condition. On the night of the sixth day he slept well, and instead of being sleepy during the day, he was in uncommon good spirits; he talked much more on every subject that was presented to him, and for the first time took part in a social evening gathering of gentlemen. Now I thought it the proper time to suspend the use of the Arg. nitr, and the improvement progressed more rapidly than I had ever before

seen it in similar cases, without the use of the drug. After fourteen days, fourteen days, I say, I sent him home as cured. His friends could not contain themselves for astonishment at his fine appearance and this complete cure of all his complaints. However, I had forbidden him to preach, and wished just to see whether his other duties, which he at once took up with zeal after his return, did not excite him. That was not the case, and six weeks later he had not only returned to society as a very useful member, but preached a sermon which, like his previous ones, edified all his hearers.

This case naturally attracted great attention, and had a very favorable effect upon the interests of Homœopathy.

§. 321.

The president of a court of justice, son of a father who had died of tuberculosis, suffered from his youth up with a cough, with puriform expectoration. After an issue was placed, however, between the fifth and sixth ribs of the left side, which issue he has since worn, the cough became more endurable and lost its malignant character; yet he daily coughed when lying down and on awaking; and, on going up long stairs he had to rest often or he lost his breath.

In his 36th year, however, his wife observed that he always avoided walking in certain streets. When questioned on this point, he replied that the sight of high houses always *made him dizzy and caused him to stagger*; it seemed to him as if the houses on both sides would approach and crush him. This vertigo disappeared at once as soon as he saw no more high houses, and it was noticed on no other occasion.

After the lapse of several years he was taken with pneumonia, during which much blood was taken from him. He recovered very slowly therefrom, and when, after two months, he finally endeavored to leave his bed, he was taken with *dizziness*, which he could not overcome. He was finally taken to the baths at Kreuth, and, at length, returned to his calling. Yet, on exposure to any exhausting labor he *always had a pain which affected the whole head, and which made the letters, when reading, run into one another*.

When he was 56 years old, he came under my treatment, on account of the *cough* which had never left him since that attack of pneumonia. He was very much *emaciated*, looked pale and had the *sunken features of an old man*. In both of the upper parts of the lungs there were now large, now small vesicular râles; on the left lower

portion, none but vesicular and bronchial, and the irritation to cough lay behind the middle of the sternum.

Aconite relieved him so promptly, compared with his previous allopathic drugs, from his cough by day and by night, that he, who was only induced to take Homœopathic medicines by the earnest solicitation of his friends, from this time forth became a faithful adherent of our art and science.

While examining his respiratory organs, I discovered also stenosis and insufficiency of the bicuspid valves, and since the cough was confined again to the morning and evening, I directed him to take Sulphur 6th once in eight days. Now he kept tolerably well for a year.

After this, his wife requested me to examine him again. He had been obliged to work very hard, and she now observed, with alarm, that he *stood and walked unsteadily* again, as often as he thought himself unobserved. Before I had a chance to propose to him an examination, he sent to me, a few days later, and his servant said that I should make haste, for he had left his master pale, breathing heavily and blue in the face, as if he were dying. In this condition I still found him, lying upon a sofa, and without any pulse, hardly able to speak, which I also forbade him, after he had assured me that he did not know of any reason for this distressing condition. Puls. 3rd. He rallied sensibly, from second to second; his pulse, which I had before known to be irregular, returned again, and, after a few days' rest, he was convalescent from a condition which I could only explain as caused by a disturbance in the tract of the vagus and sympatheticus, which must have been occasioned by a diminished process of oxidation in the blood, continuing for so many years. A long respite followed again, and he always relieved himself with Aconite and Pulsatilla.

He finally came to me, however, unbeknown to his wife, and complained that he could only pursue his calling by the greatest effort of will, and that he would be compelled to ask for a vacation, for an incessant *vertigo* pursued him, which compelled him always to go close to the houses, in order to have something to hold on to; moreover, the little and ring-finger of his left hand had become *insensible*; he noticed, also, in the *whole left side of his body an indescribable weakness*.

Now, according to what principle was this man to be treated, or was he to be held as beyond treatment? Did he belong to the category of Tuberculosis, of Ataxy, or of diseases of the heart or brain, and where, in the drug-provings even, could there be found the truly-

indicated remedy, without considering the concomitant conditions which were also presented therein?

Was there a triumph to be gained here by the reactive force over the disturbance, and how was the "*natural* curative process" (?) to be accelerated, to be aided, or indeed, to be produced at all?

After what has been already said, it will not seem strange to any reader, that this man also, after he had taken Arg. nitr. 2nd dec., every two hours, for five days, was relieved of the affections of the brain and spinal marrow, which had lately renewed their attacks, and more violently than ever.

Even on the very first day he congratulated himself that he could go to his office without fear of staggering or stumbling like a drunken man. Two weeks later, he had also lost the insensibility of the left hand; his complaints of weakness in the left half of the body were heard no more, and his respiration was as free again as it ever had been.

§. 322.

A merchant, thirty-seven years old, his parents yet living and healthy, had taken part, sound and healthy, in the revolutionary war in Baden, as common cannonier, without any bodily injury; when seven years old he had the fever and ague; in his twentieth year, gonorrhœa, which was suppressed by injection; besides this he was never sick.

In April, 1860, when thirty-seven years old, he was, when stooping to pat his dog, and when in his best health, surprised by suddenly *coughing up blood*, and, within the course of half an hour, he coughed up a wash-basin full. He had indeed, for several years, coughed some every morning, without taking any notice of it. This cough, however, with bloody expectoration, had now been diagnosticated and treated as hæmorrhoidal congestion, with leeches *ad anum* and cathartics, although the patient had always assured his physician that he had never suffered from piles. On account of the pulmonary hæmorrhage itself, which lasted three days, common-salt was ordered internally, and those purgatives were given every day, in form of pills, to force an evacuation, which, however, had never been wanting. Four weeks later, hæmorrhage again, and now, for half a year, this hæmorrhage returned almost every four weeks; sometimes lasting only half a day; sometimes two or three days. After this, the hæmorrhage intermitted for four months. While taking a walk in February, 1861, he suddenly had another violent attack of hæmorrhage.

hage, and to the treatment of this attack I was called in. Of tuberculosis pulmonum, or hæmorrhoids, there was no trace whatever. The man had a yellow complexion, was emaciated, very weak, and had had no appetite since he began to take the pills. Sleep good; pulse 90; respiration 35; *stitching pain in the region of the fifth rib, on the left side.* In the same place there was a fine crepitant râle occupying the space of half a guilder: Aconite 3rd, in alternation with Arnica 3rd, every quarter of an hour. The bloody expectoration decreased from hour to hour.

The next day Aconite and Arnica were given in hourly alternation, and only after two days all the blood had disappeared from the expectoration. Now œdema of the feet ensued.

Thus far, the hæmorrhage had always taken place during a longer spell of damp weather, and his condition is even more aggravated when there is a cold rain.

On the sixth day, on account of the loss of blood, China 3rd, every two hours; nourishing food, since his appetite was restored, with wine, or wine with Seltzer water. The pulse remained the same; the respiration fell to 28. But, on the least mental emotion, the pulse rose and palpitation of the heart ensued. The patient assured me, that, conformably with his excitable temperament, his pulse had always been very rapid; that he had always been liable to attacks of palpitation, and that, for many years, he had been careful not to run up stairs so rapidly as he had been previously accustomed to do. His bowels moved generally every day, sometimes not so often, but always of themselves. As his appetite increased, the patient gained strength very rapidly, but, on account of his decided hydrogenoid constitution, it was necessary that he should take every day, from this time forth, one dose of Nux 3rd, and three or four doses of Natr. sulph. 3rd. The œdema of the feet disappeared after ten days.

On the 27th of May, another hæmorrhage after a fit of passion: Aconite and Arnica as above. The hæmorrhage stopped on the second day, and from this time forth, I gave Nux and Natr. sul. daily. Rapid improvement; intermission of the remedies. The patient passed every evening during the summer in his usual society, which could not wonder enough at his healthy appearance, after what had passed.

November 10, after a business journey, hæmorrhage from the lungs again, which lasted only half a day, and ceased of itself. Nux and Natr. sulph. were taken, as ordered above, on his own responsibility.

January 27th, 1862, a new hæmorrhage, after violent excitement, which, however, only lasted half an hour.

Notwithstanding these repeated attacks, the patient had enjoyed remarkably good health, and congratulated himself upon a fine and fresh appearance and good spirits; the beat of the heart, however, always remained at 85 to 90.

In September, upon a business journey, *intermittent fever, connected with pulmonary hæmorrhage*. Treated by a Homœopathic physician with Ipecac, Quinine and Aconite; the patient returned home without loss of strength. Nux and Natr. sulph. to be taken again for eight days, and then intermitted for eight days, etc.

After January, 1863, no more medicine was used, because auscultation and percussion had not detected, for six weeks, the slightest abnormality; the patient felt well, in every respect, and began to grow corpulent.

June 6th, after a cold taken during a profuse sweat, on a hot summer evening, he had a chill. He slept well, however, through the night, but awoke in the morning with violent febrile heat, with *head-ache, stitching pains behind the fifth rib*, where the stitches also had been observed during the attacks of bleeding. Every breath, and, still more, every cough, although he coughed seldom, caused a severe stitch in this place, and the patient, hence, looked every moment for his hæmorrhage. Thus I found him, in the morning, bathed in sweat; with face reddened; pulse 120; respiration 40; the tongue with a heavy yellowish white coating; much thirst; disgust for all food; was only able to take milk, because everything else was vomited up again; Sputa, consisting of foamy blood, crepitating rattling in the seat of the pain; the percussion tone scarcely perceptibly muffled.

The previous attacks of hæmorrhage had clearly arisen from a hydrogenoid soil; hence I did not hesitate, a moment, in this pneumonia, to give Iod. 3rd every half hour, till the stitching pain remitted, and after that every hour.

Up to the next morning, there had been no change at all. This striking negative result, and the anxiety of the patient to keep himself thoroughly covered, since a chill crept over his whole body upon the slightest movement although the room was warm, in connection with the increased difficulty of breathing, induced me to give Phosph. 3rd, every hour.

Up to the third day, against all expectation, there was hardly a perceptible improvement. The cough had assumed even a dry spasmodic character, which I had to ascribe to the influence of the Phosph. The

sputa were rust-colored, containing air-bubbles of large size, and were scanty. The results of auscultation and percussion, the pulse and respiration, the temperature of the skin and the perspiration, were as on the first day.

To be frank, I did not know any longer what to think of it. I gave Sac. lac. in order to be able to gain an undisturbed observation, and opened the windows, *since the patient very earnestly longed for fresh air.*

June 11th. The same state of affairs, only *sensible emaciation and wasting of strength.* The sputa had become yellow, but certainly not colored with "Bile-pigment" (!); China 3rd, every two hours.

June 13th. Less pain, at least, but permanent fever; he spoke confusedly, and did not know his wife; *slept no more*; when he talked, his speech was broken, and he gasped for breath after every word. Phos. ac. 6, every two hours.

June 15th. The fine crepitant râle became coarse and extended more upward. Sputa puriform.

June 19th. Some relief, as the cough was less frequent and the respiration was more quiet. The sensorium became free again. Up to this time, milk and sugar-water only were desired. To the former Seltzer water was now added.

The effect of medical treatment amounted to just about nothing; nevertheless the Phos. acid was continued.

June 21st. The appetite was somewhat improved, and now and then mucilaginous broth was taken. The urine constantly presented the usual sediment of uric acid, and the stools occurred at first daily; later, not so often, though nothing was given on that account. The strength seemed to increase. No further remedies.

June 25th. *Irresistible inclination to leave the bed and sit by the open window.* Now in the arm-chair—now in bed again. The coarse crepitant râle, the puriform expectoration, the cough, the fever and the pain in the side were still present, though in a less degree.

June 27th. In addition to the other symptoms, he was still *hoarse*. On the other hand, he could remain somewhat longer out of bed, though it was impossible for him to walk, without holding on to something with both hands; he was quite too weak to stand erect. Every time he *sat by the open window he felt much refreshed.*

June 30th. The fever sensibly consumes his strength; his tongue has a *yellowish white coat*, although he has more appetite; the urine full of uric acid; pains in the calves often torment him the whole night, and, during the day, he is constantly tormented with *formication* in the arms and legs. The pains in the left side of the chest still

continue, only they are somewhat deeper and are not any longer increased by coughing; œdema of both feet. My fear that I should lose this patient, by reason of his hectic fever, seemed justified; yet I auscultated him again and found that the coarse crepitant râle was limited in the same spot behind the fifth rib, but above, was more extensive, while the pain now was pointed out as corresponding to the sixth rib, which also was painful, on being pressed upon, as far as towards the spinal column.

I should have been the more pleased to have obtained an anchor, a compass, and a helm from the physiological school, since this patient had become a convert to Homœopathy under my treatment. But the physiological school had neither for this case, nor for an infinitude of other cases, any pilot.

I had nearly lost this man from disregarding the changes which had taken place in the state of his body by reason of the treatment followed for so long a time. First, the circumstance, that the pain in the side now corresponded to the sixth rib and no longer to the fifth; that the patient now, on being questioned, declared the present pain to be quite different from what it was at first; moreover, *his longing for fresh air*, which was never so marked before; the indifference to moist or damp weather, observable even before his last illness; his corpulence, which of late had sensibly increased again; all these went to prove that the hygroscopic condition of his blood was removed; on the contrary, that its oxidation, even before this last sickness, was depressed, and, during this disease so sank, that the spinal marrow began to suffer under it, which condition was clearly connected with this *intercostal neuralgia*, the cramps in the calves and the *formication*.

The course which this disease pursued after the use of Arg. nitr. 2nd decimal, every two hours, is certainly extremely interesting, and appeared to the patient himself really mysterious.

Although I never allow a remedy to be taken during the night, very rare cases excepted, and did not in this case, yet the patient declared on the very next day that the pains about the sixth rib, which had affected him so seriously, had become so trifling that they hardly troubled him at all; also that for many weeks he had not slept so long nor so quietly, and had more appetite again. But the most remarkable thing was the daily decreasing crepitant râle, and the corresponding decrease of the cough and the puriform expectoration. The patient took a new lease of life, and, after using this remedy for seven days, the pulse had sunk to 80, whereupon the Arg. nitr. was laid aside.

The convalescence from this fatal sickness progressed with gigantic strides, and by the end of August this man was perfectly cured; he had regained his previously fresh look, his good spirits, and his mental and bodily strength, returned to his occupation, and remained well.

§. 323.

A young man of 18, of sound parents, had suffered from his youth with *incontinence of urine at night*, and, after all sorts of tortures, had to leave the Institute of which he had been four years a pupil, being declared incurable. In his childhood he had often had swollen glands. Now he is large and powerfully built, and I observed nothing abnormal about him, but that his pupils were large, and that the *stroke of the heart* was somewhat more frequent and *rather weak*. He had never suffered from worms; there was nothing peculiar to be observed about the constituents of the urine.

Was it still indicated in this case to direct the patient to retain his urine during the day as long as possible, or should I rather give him Bell., Puls., China, Causticum, Sepia, or Sulphur, and on what grounds?

This young man, from the first day in which he had taken Arg. nitr. 2nd dec. morning and evening, and had laid the same aside after six days, had never soiled his bed for a period of six weeks. Then he had to resume his studies again, and was obliged to pass the whole day within four walls. It was certainly an unexpected occurrence that, after this day he wet his bed again.

I had not given Arg. nitr. any more after six days, because I thought it useless, after the end seemed to be already attained, to continue its use any longer. Notwithstanding the continuation of his studies, I advised him to take this remedy again, and directed him to walk abroad at least an hour every day, and in all sorts of weather. After the lapse of ten days the incontinence ceased and returned no more.

§. 324.

A large, powerfully built merchant of 41 years of age, always healthy, two years ago had, while traveling, taken intermittent fever, which was suppressed with large doses of Quinine. Since that time he has never been quite well, while previously he had never been sick in all his life, and always rejoiced in a blooming appearance. A year ago he was taken with a gastric fever, which had become typhus,

as his physician told him. He was never unconscious in the fever, however, and was without hallucinations; had no diarrhoea nor any trouble about the chest, only constant pains in all parts of the head, especially in the occiput, which deprived him of sleep, and every evening he had fever.

These pains in the head finally extended to the eyes and the lower jaw. *Itching pustules* also formed *on the left shin bone, one of which developed into an ulcer.*

After six weeks of allopathic treatment, under which he constantly got worse, lost flesh and all his appetite, he was *so much unstrung and irritated* that, without the knowledge of his physician, he sprang up to get into the open air.

Although punished for this by utter prostration of strength, so that he had to ride home, he had, however, to his great delight, the first good night's sleep, and thereupon more appetite, and that suggested to him the idea that his case had not been managed well.

When he came under my care, this man, once so corpulent, was so *emaciated* that his clothes hung upon him as on a clothes-horse. *At the same time his face was sunken, colorless, and he complained of constant boring headache, of photophobia and weakness of sight, which alone would have prevented his writing his name legibly, had he not been also hindered therefrom by trembling of his hands;* furthermore he reeled so from vertigo at night, and when his eyes were closed, that he always had to hold on to something. *To fix his thoughts on anything, or give his business any consideration, was impossible for him; on attempting it, it immediately got dark before his eyes, and the headache increased. Moreover, he could not separate his jaws wider than was necessary to admit a quill.* That prevented his speaking, and he could on this account take no food but fluids. But what distressed him most was a disgusting odor from the *little ulcers* with which his inner nose was lined, fearing as he did that those around might be annoyed by it, which, however, was not the case. The stools were regular, the *voice hoarse*; no change to be discovered in the organs of the chest upon auscultation and percussion; yet the *impulse of the heart was very strong*, and audible over the whole thorax: pulse 98. The back ground of both eyes is obliterated, and the vessels upon it cannot be distinguished. Sometimes there was a hæmorrhoidal flow, but no tumors. The fever in the evening was no longer very perceptible, but it seemed to him as if he had a fever in his sleep. Since he was taken sick he could never go up stairs without an increase of the *difficulty of breathing.*

Whoever has read the recent work of Dr. Eisenmann, on Locomotor ataxy, will not hesitate at all to bring this disease under that head. But where would one, according to this work, find the remedy for this case with certainty, or even find information as regards a maxim which might lead him to one?

This patient, also, after the lapse of two months, was relieved of all his sufferings by the use of Arg. nitr. He took it morning and night for eight days, then omitted it for eight days, and so on, without the appearance of any drug symptom. After the sight was restored again, the nose cured, and the trembling of the hands, after it became easier for him to go up stairs, there still remained an insufficient motion of the lower jaw, and I hoped that the secondary effect, or rather allowing the remedy to complete its effect, would restore this also. It continued, however, for half a year later, and the staggering, when the eyes were closed, was still to be observed, though in a much less degree. The previous prescription was repeated. After eight days there was marked improvement. No further remedy was given, and, after two months, the cure was complete.

This case clearly belonged to locomotor ataxy according to Eisenmann, and indeed to malaria-ataxy, for here the malaria might be confidently assumed as the primary cause, since no other disease had preceded it, and in fact, no other cause or condition could be pointed out.

The remedy in this case was taken from the homœopathic drug-provings. But I believe Eisenmann and his colleagues, when they say that they have seen no effect from one-sixth of a grain of Nitrate of Silver and other allopathic doses, even when a proper indication were presupposed. But we homœopaths have not only Arg. nitr., Arsen. and Iod. as problematical remedies, for locomotor ataxy, but, as tried remedies, Arg. nitr., or rather Chloride of Silver, Ammon. mur., Sulph., Arsen, Bell., Bry. Cyclamen, Mangan, (I always use the acetate), Gratiola, Phosph. and Phos. acid.

§. 325.

A near-sighted Treasury officer, who wears concave glasses, and is fifty-one years of age, had the cholera in Munich, and subsequently typhus abdom.; during the past winter he suffered from facial neuralgia and swelling of the bones of the right foot. At the same time an *herpetic eruption was observed upon the occiput*. The more this increased, the less were the pains of the face, and in the spring they

ceased entirely. The eruption also gradually disappeared. On the other hand, in the month of March, there was determination of blood to the head, which was treated with Sulphur, and which did not return. During a leave of absence, however, these congestions returned in a very distressing manner. In course of an hour, they were repeated four or five times, after they had always ceased spontaneously. He then suddenly felt how the blood pressed from the heart to the head, which became blood-red, and this color extended behind the ears, even. Gradually the blood ebbed again and sweat appeared upon the head. These rushes of blood acted injuriously upon the eyes. *Since he has had them, objects appeared as if enveloped in a mist; sometimes they seemed double.* After a forced walk these *rushes of blood came also at night*; there was a stitching pain, then, from the right into the left ear, as if a thrust were made there with a dagger. In the dark he cannot walk without reeling and laying hold of whatever he can.

Nausea now followed these repeated attacks, and, called to see him once at night in such an attack, I gave him Bell. 3rd the next morning; *confusion of the head* being a sign that Bell. was not indicated. He can read with his glasses only No. 13 of Jæger's test letters; the fundus of the eye is injected; the large blood vessels are indistinct.

If we now review the cases, with the accompanying groups of symptoms, which have been cured by Arg. nitr., what a world of doubts must seize the skeptics, if they should undertake to establish an indication for only one of them even! I must myself acknowledge, that, if, in Therapeutics there was not a synthesis upon the basis of natural laws, a mere analytical comparison between these groups of symptoms and the drug-provings, as it is obtained according to the law of similarity, without a careful consideration of the accompanying constituent circumstances, could hardly lead to an indication which could foresee the result, and would be free from contingencies.

To remain a prey to contingency, we need but follow the erroneous precepts in our own literature, as, for instance, the assertion, "that the disturbed function of the nervous system was the point of departure of all diseases." This contradicts all physiological, pathological, and therapeutical experience; for we observe in physiological, pathological, and therapeutical processes, without exception, a reciprocal action of all the parts of the organism upon each other, without beginning or end. As many of these clinical cases show, the causes of disease do by no means, in all cases, primarily affect the nervous system. In fact, the influence of the nervous system, so little subject to oxidation and change, can only be conceived of as a mechanical one, by which

a certain amount of tensive force is metamorphosed into functions of the laboring organs of the body, so long as they are in health.

The blood and the laboring organs considered as the counterpart of the organs of lysis, *i. e.*, the nervous system, we find, as a rule, first affected by disease, though the converse does not seldom take place.

The pathological affections of the nervous system have no greater importance than those of the laboring organs, and *vice versa*; for they are dependent upon each other, and it can by no means be determined, always, which of the two is the part first affected.

Thus, wherever, in the groups of symptoms just laid down, the point of departure of the disease, or the effect of disease-producing causes, may have taken place, in every case the joint result from the connection of these causes with the conditions of the organism, is a more or less diminished influence of oxygen upon it, and this, all the same, whether the indication could be established upon the ground of functional and nutritive changes in the laboring organs, or, first upon the ground of the purely nervous symptoms.

This patient now felt, even after the first day in which he had taken Arg. nitr. 2 dec., morning and evening, not only no improvement, but such disturbance of his power of vision, that he was really afraid of losing his sight entirely. He could now only read No. 17 of Jæger's test letters, and this alarmed even me not a little. Sac. lac. A week later, he read No. 13 again. Thus this aggravation, produced by Arg. nitr., was spontaneously removed. Eight days after, the same condition as when he first came. I now ordered him Arg. nitr. the 10th dec., to be taken morning and evening.

Four days later, he returned with the assurance that he could now see better than ever before, and could actually read with his glasses No. 4 of Jæger's test letters without difficulty, although, with the ophthalmoscope, I could discover no change to have occurred in the fundus oculi. On the other hand, he had felt the good effect of these drops almost instantly; he thought he sensibly felt how the blood settled down from his head. I now directed him to set the drops aside, and some weeks later, he called again only to say that his congestions, which he noticed for a few days longer, had entirely ceased, and he considered himself quite cured.

Was this man not on the high road to amaurosis? The amblyopia of this man could not, in any case, have depended upon changes of the forms of the eyes or their nerves; for no solid part of the eye, the brain, the spinal marrow, or of a nerve, is brought back to its normal state in so short a time, while, on the contrary, the function often

changes almost instantly, as, for example, that of the muscle of Brügge in the crystalline lens. The nervous system indeed offers to hunger the greatest resistance. The blood, for example, in this case, loses 75 per cent., the fat 93, the liver 52, the heart 44, the intestines and external muscles 42, the skin 33, the respiratory apparatus 22, the bones 16, the eye 10, the nervous system only 1 per cent. Besides, all effects upon the nervous system, as, for example, from narcotics, chloroform, etc., are transient, and become permanent only when such effects have lasted months and years, and changed the character of the blood.

• This resistance of the nervous system against hunger, falls far short of proving that the interchange of substance in it is very trifling, but demonstrates that it exceeds all the other organs in its capability of regenerating itself from the blood. Hence, as the blood, so also is the nervous system, and generally not *vice versa*, because the blood alone stands in direct relation with the external world.

Whoever finds the acquisitions of physiology confirmed at the sick-bed, can hence never declare the nervous system to be the only point of disease, else he would resemble those who, in consideration of space and time, are inclined to believe the cause of the storm-wind to be driving behind the latter, or to be a blowing angel, figuratively speaking, while it is nothing else but a part of the atmosphere, which is colder than that which happens to be before it, and which hence attracts it.

The forms, as well as the number of the diseases, in which Arg. nitr. has accomplished a cure for me, are, however, far greater. The former extend themselves to most disease-forms which occur in this bodily constitution, and indeed even to the specialties of adults and children, *e. g.*, to one form of hydrocephalus. The sphere of Arg. nitr. is hence so comprehensive, because it stands, as does Manganum, with its effects, midway between Sycosis and Psora, and is all the more valuable, because complications of these two constitutional characters are not infrequent.

§. 326.

OF THE OXYGENOID CONSTITUTION.

This constitution is either inherited from parents, or acquired by accidental diseases of a grave character.

The blood, the bearer of the most various material relations, is a product of the organism, *i. e.*, of its constitution, and its mode of

elaboration, as is well known, is handed down from parents to children, and that for several generations.

Not only the blood, but also the skeleton, the musculature, the digestive and respiratory apparatus, the nervous and sexual system, and even the manner of death, all receive the impress of the parental forms and characters with the very first germs of life, and form the congenital constitution. The immunity inherited from parents against the so-called contagions and miasms, is the most important inheritance; above all, is a great factor in human life.

However, a want of power to resist the influence of oxygen is also acquired by severe epidemic diseases, by scarlatina, dysentery, measles, diphtheria, typhus, intermittent fever, measles, cholera, etc., and (to these also belongs syphilis) hence mere diseases, the material causes of which are *productive*. Every such disease begins with a so-called preliminary stage, or rather, *stage of development* of the poison which produces it, and many of these diseases can be engrafted. This having been the case, the person upon whom the disease has been engrafted, remains for a long time perfectly well. After a certain number of days, however, the disease, which was engrafted, breaks out. The difference consists only in this, that, as regards epidemic influences, the material qualities appear to be unknown, while those engrafted are known.

At the same time, several of these diseases cannot be communicated by contact; but where the dejections of typhus, dysenteric or choleraic patients are deposited, none of which can be transplanted from person to person, then a new focus of infection may originate, in which the poison needs some days for its reproduction, for immediately after its dejection it is not poisonous, as experiments show.

Thus many of these poisons go through a stage of development outside of the organism even. Even the so-called marsh-miasm needs a new development during the summer, while, during the winter, the intermittent fevers disappear.

Hence, whether we introduce into the blood much of the variolous pus, for instance, by one or ten inoculations, this affects the duration of the incubation, which runs its course perfectly free from symptoms of disease, as little as it does the specific diseases which thereupon ensue.

Hence the assumption is fully justified, that this period of incubation can only be taken as the period which was necessary at first for the *increase* of the poison to a certain amount, in order to make it efficient. The fever and ague poison, for example, requires two, three, four or eight days of reproduction for its accession; cholera four times

seven days; hydrophobia cleaves to the number nine; typhus recurrens occurs after eight days; small-pox has an eight day period of incubation, the measles a fourteen day period, with new eruptions on the third or fourth day, etc.

These periods are, therefore, not to be confounded with the critical movements, the periodicity of which belongs to the human organism, §. 49, 81; they are the specific expressions of specific morbid matter.

Another peculiarity of these periods consists in this, that in every respect, they operate specifically, and that their effects are always accompanied by the same morbid symptoms, in all men who are susceptible to them; this, however, cannot be said of the results of catching cold, for instance, for this produces in one inflammation of the throat, with another pneumonia, with a third diarrhœa, etc., since here the individual morbid predisposition is far more decisive upon the character of the result than the cause of the disease.

Thus these poisons increase and reproduce themselves according to determinate periods of development, and their effect upon men is constant and always the same.

But whatever runs through periods of development and always begets its like, must, without doubt, be living.

Consequently, these poisons will be similar to the various substances already made known elsewhere; for example, similar to the protozoa, fungi, and vibriones found in connection with skin diseases, and thus we find some which flourish best without any supply of oxygen. Yet everyone of them is of different specific *composition* from material elements, which are the conditions of its existence. Thus they belong to the ferments, and what was said in §§. 18, 22, 35, 99, holds good of them.

Accordingly they induce the most intense processes of reduction, and these again always leave behind them, when improperly treated, such a change of the constitution of the body, that its blood, for the whole term of life, can resist but too feebly, an immoderate influx of oxygen, and that sometimes the most ineradicable consumptions may arise therefrom. It seems, therefore, as if, in that case, the ferments of the blood, which most likely are given with the vibriones, become so changed that they too greedily attract oxygen to themselves and transfer it.

In favor of the hypothesis of living, *i. e.*, organic ferments, Skoda in Vienna, Griesinger in Berlin, Schützenberger in Strassburg, Polli in Turin, Gietel in Munich, Liebermeister in Basle (v. his inaugural address, 1865), declare themselves, so that it only needs confirmation by further experiments. For this, homœopathic drug-provings would

be the most appropriate, which, likewise, should not neglect the microscopy of the blood, and I am of the opinion that the vibriones of the blood will be the result of these investigations.

Affections which, from such causes, can lead to consumption, form originally the most various chronic local diseases, and especially in the osseous and glandular systems, as well as in all the other organs, and even in the nervous and muscular systems.

If now, we keep in mind that which has just been discussed, we can never be in doubt about the quality of such a bodily constitution, and can easily remove all diseases originating in it.

I would like, moreover, to direct the attention of our opponents to this, that in view of such qualities — no matter whether they constitute the original diseases or their results — the necessity stands out very prominently, of treating both with Homœopathic attenuations only, for who could ever imagine that he could reach such organic molecular bodies swimming in the blood, which are themselves composed of various substances, with Allopathic quantities of drugs, especially in dysentery, cholera, syphilis, sycosis; in short, in all these forms of disease and their sequelæ, in such a way as to change them for the re-establishment of health, and that without any injurious effects?

That scholars of such weight, without possessing experimental evidence for their views, nevertheless accept the existence of these molecular bodies, as begetters of disease, is, so far, a welcome sign of a new epoch, even in the sphere of the physiological school, as it proves that this school begins to make use again of logic, so long neglected in the formation of its conclusions. But it is thereby brought so near to Homœopathy, that, as a natural consequence, it must leave its large doses with which it can never produce or moderate any processes of oxidation or reduction whatever in the diseased organism; for, if we once admit the effect of such molecular bodies as are recognizable neither by physics nor chemistry, and yet can make the organism sick, then we must, *a priori*, also acknowledge the effect of those Homœopathic dilutions, at least, the substances of which can be demonstrated both by chemistry and physics, and this extends even now as far as the tenth Homœopathic attenuation. But the first step is hereby taken which must consequently lead to the thorough study of Homœopathy, which, as well as its practical application, according to the contents of the last paragraphs of this work, has become, with irresistible necessity, the solemn duty of every true and conscientious physician. For those who acknowledge living molecular bodies as causes of disease, there is, at any rate, no longer any *scientific* ground for opposition to Homœopathy.

The most magnificent, and, since the days of Hahnemann, the greatest theory and practice which have risen upon the medical world is Dr. Stamm's Nosophthorie, that is, the aim to seek out as far as possible, the origin of human sufferings and to suppress *these causes by force*.

He has thus far published his views upon the mode of origin and eradication of pest, yellow fever, and typhus fever (Leipzig, 1862).

In the following I will add a trifle to this subject, and, partly from the experience of many years, partly from the results thereby attained, show that the eradication of two forms of disease and plagues can be very easily accomplished, which, it is true, do not make so fatal an attack as pest, yellow fever and typhus fever, but have brought, and still bring a greater, and, indeed, the most terrible chronic misery upon the life of man, not only in and by themselves, but especially by their complications and sequelæ, to wit, the eradication of chancre and gonorrhœa — of the chancre and gonorrhœa contagion.

These forms of disease occur not only with the married and unmarried, who expose themselves to the contagion, but also with married people who marry in perfect health, and who have had no intercourse but with each other. Whatever skepticism, without experience, may allege to the contrary, its opinions have been judged by the want of success and the absolute injuriousness of its treatment of such diseases, and Ricord himself stands forth to it as a warning example, though he did not make his confession till he had vacated his professorial chair, §. 294, and, in the physiological school the disputes still continue regarding the origin, character and treatment of these diseases.

Syphilis, under which designation Homœopathic practice has learned to comprehend the non-sycotic chancre and its consequences, destroys numerous nitrogenous formations in a specific direction: no fat, no gelatin, it is true, but the nitrogenous soft parts of the bones. Quicksilver immoderately used in this disease and its sequelæ, hence notorious for years past, operates in minimal doses even, in consequence of the given conditions, as a fat-former, separates the albumen and thus renders impossible the further extension of the syphilis for a long time. In small doses, as well as in large, it operates upon the non-syphilitic quite like the syphilitic poison, as is well known. The most powerful antidote of mercury is Sulphur, hence it is highly prized in the physiological school for convalescents from syphilis, as is seen at Aix-la-Chapelle, Baden near Vienna, etc. Without losing

myself in wide detail of the experience of years, and of copious material, I will select from them only two facts.

1. From the same woman, on the same day, and, indeed, in the very same hour, one may get a syphilitic non-sycotic ulcer, another sycotic ulcers, while yet another may escape without any infection.

2. The woman who makes use of the Sitz-bath and injection, not too long before or after coitus, does not become diseased, and furnishes neither syphilitic nor sycotic morbid matter. What results from this?

Surely a substance cannot be an *absolute* poison if it fails to infect some men; on the other hand, such a substance should be considered as a poison, according to the teaching of the Professors, because it does infect and sicken many men. One would also think that this substance can be *no identical poison* because it produces syphilis in some and in others sycosis in a homœopathic sense, hence this substance can only be a *relative* poison. Finally, this matter, while producing such different effects, nevertheless has its origin only in the vagina; for, on one hand, no man has ever had any syphilitic ulcer or any sycotic affection who did not practice coitus, on the other hand the vagina is *very often* and very variously diseased, even before the first coitus, and ill-health produces in the woman a virulent disease of the vagina only by intercourse. This substance, in question, can hence only be as it is in animals, the product of specific decomposition of various male and female secretions and excretions detained in the vagina after coitus, which secretions and excretions are originally the same everywhere.

If we will not allow ourselves to be blinded with the unnatural idea that Syphilis has been handed down for thousands of years, from generation to generation, as an hereditary sin, without ever having been propagated anew, then we must assume that this product of decomposition may be prepared new and fresh every day in any vagina, that hence it must always be *one and the same vaginal poison*, hence can be always eradicated by the prophylactic means under No. 2.

In the yearly compulsory re-vaccinations, thirty or forty individuals must often be vaccinated in the same way and manner from a *single child*. Now, the same observation is always made, that some have the specific pustules on the arm without any change; in others these degenerate and become unhealthy ulcers, followed by fever and a long course of ill-health; while others, again, come off entirely unharmed and do not produce even a trace of a pustule. Now, I have also found in the results of coitus, with all precision, *from one and the*

same cause, three-fold effects, which clearly, here as well as there, are only referable to the variety of the *conditions*, to the variety of the bodily constitution. But this essential reason [*ratio essendi*] became clear to me only after I had given myself up to the study of Homœopathy.

Thus, before such a disease can develop itself, the conditions for it must first be given, and only within, and in connection with, the *hydrogenoid* constitution, does the vaginal poison become the cause of the sycotic secretion of the so-called gonorrhœa. It can produce gonorrhœa, as well as ulcers; but these are not cured or benefited by Mercury, but are aggravated, and, if the gonorrhœa is removed by injections of Nitrate of silver, and such ulcer is cauterized, or otherwise removed, not radically cured, by internal remedies, the gonorrhœal dyscrasia is always produced; as, by cauterizing the syphilitic chancre, the so-called *chancre-dyscrasia* is produced upon the soil of the *oxygenoid* constitution. Chronic diseases, which result from these conditions for the begetting of the chancre-poison, will be cured by Mercury, and other remedies belonging to this class, while, by the use of the remedies for sycosis, for example, Thuja or Natr. sulph., they will experience aggravations.

The most important *circumstances which accompany* the chancre-dyscrasia, and its various diseases, consist, as I discovered in accord with district-physician Dr. Wolf, one of the most distinguished, cautious, and philosophical practitioners, in constant sleeplessness, dryness in the throat, cracking of the joints, chilliness when at stool, and in gradually increasing paralysis, after the hyperæsthesiæ, which in all cases precede, have ceased to rage.

The chancre-dyscrasia, the syphilitic, never presents such an independence as the gonorrhœal dyscrasia, the sycotic; for, while the latter is not only conditioned by the hydrogenoid constitution, but pushes it also to a fearful extreme, the chancre-dyscrasia may become complicated with the carbo-nitrogenoid constitution, and then forms a doubly-difficult problem for the physician. The indication for the treatment of such diseases is dictated by the fact, that the production of sycosis, or syphilis, is conditioned by the bodily constitution, and not by the causes alone.

§. 328.

To give clinical illustrations of cases, which would come under the title of this section, is quite superfluous, and all the more, as diseases of this kind are easily diagnosticated in their complications and sequelæ, and, at the proper time, readily cured; also, if one, as already

said, is able to recognize the constitutional conditions of their origin. Hence, it will be more instructive next to present clinical cases from the domain of those constitutions from which the syccosis is wont to arise.

First, however, a false assertion of Dr. Felix Niemeyer, in his *Lehrbuch der speciellen Pathologie und Therapie*, must be refuted. He says (loc. cit., pag. 71, Bd. 2), as follows: "In from eight to fourteen days, the discharge in gonorrhœa becomes gradually less, assumes again a more mucous appearance, and may at length disappear in the fifth or sixth week, without any interference of art, as is sufficiently shown by the result of Homœopathic treatment."

That there are men who call themselves Homœopaths, for the sake of playing the quack, is well known, as is the fact that the same men require five or six weeks, or even longer, for the cure of gonorrhœa, and that this happens to them, as it does to Niemeyer himself, for he proceeds: "But much oftener a scanty discharge remains stationary for a long time, for months, or even years;" that these pseudo-homœopaths thus effect as little as Niemeyer himself, is quite as well known, as is the fact, that the average period for a perfect cure of gonorrhœa, by Homœopathy, is twenty-one days, if there are complications, and from five to thirteen days where there are none. The whole text-book of Niemeyer is nothing but an audacious therapeutic rhodomontade, calculated to serve as a model for ignorant physicians with sluggish intellects. It is not worth the trouble to say much about this delusive work; but lest it should seem that I have judged him too severely, let any one read upon the treatment of Syphilis, on p. 697, Bd. 2. "I follow the principle to break off the treatment on the occurrence of salivation, not only when I use the Quicksilver in the form of ointment, but also under every other mercurial treatment, and do so for the single reason, *that I regard the appearance of salivation as a welcome indication* that a sufficient quantity of the Quicksilver has been absorbed." Thus to produce salivation, mercurial poisoning, is, to these people, a cure! This is applying the juridical procedures of the ancients to disease, by demanding an eye for an eye, a hand for a hand, a disease for a disease, and this treatment, with which the police should interfere, is called *science*! To render a disease latent by the production of another one, far more dangerous, so that it may sooner or later break out again in another form, this, these teachers of youth call a cure!!! Woe to the many thousands deserving of sympathy, who, ignorant of the danger to which they are exposed, turn full of confidence every day to such titular physicians!

Practical examples of the hydrogenoid bodily constitution.

In these clinical cases *those concomitant conditions* only are printed in italics which belong to the diagnosis of this constitution; to find out and underscore the other symptoms recognizable themselves from the drug-provings of the remedies exhibited, and belonging to the formation of the indication, will be an easy lesson for the beginner.

A woman, 29 years of age, of healthy parents still living (the father is 89, the mother 75), has suffered, according to her statement, from her youth, upon the slightest bodily exertion or mental emotion, with palpitation of the heart, without any known cause, except that, in her youth, she was very timid and easily frightened, which she ascribed to hearing children's tales. A physical examination revealed neither valvular defects, nor any other nutritive changes of the heart, only a very exaggerated and accelerated motion thereof; even, during complete bodily rest, the pulse was, at the same time, 80-81 to the minute.

Of juvenile diseases she had been through with whooping-cough, but no other. The color of her skin is brilliant white, the skin clear, without ever having presented any eruption, hair dark-brown, eyes blue, figure slender, form symmetrical. She had already given birth to three children without difficulty, but has suffered with an incessant headache since her last confinement, which was quite normal, and after which she nursed her child for two months, when she weaned it from lack of milk; all this happened six years before she came to me; this headache occupied no definite place, but extended itself from the forehead over the vertex to the occiput, only sometimes it was most severe upon the vertex. This headache did not permit her to visit, or receive visits from, her most intimate friends even, because it was so aggravated by talking or hearing others speak, that vomiting ensued. and to make the pain at all endurable, she had to betake herself to her bed, where she remained for three or four days motionless, and lying upon her back.

Not unfrequently, pain in the stomach set in, which ceased of itself after the discharge of sour water, rising in the throat with nausea, and also the eructation of tasteless gas, which was most frequently induced by the ingestion of vegetable acids or vegetables. Her appetite was good, but not craving; she refused to eat meat — even the smell of it was repugnant to her.

The menses, as indeed was indicated by the pain in the vertex, were irregular, scanty, and pale, and were generally six or eight days too early. In the interim there was more or less fluor albus, which was

debilitating, and the accession of the menses was announced by a violent colic.

The respiration was unrestrained, but in the apex of the right lung there was dull respiratory murmur, in a small portion, however, without any change of sound on percussion. She never had any cough, and the digestion was always regular. To these were added, since her last confinement also, *cataleptic attacks*, almost every morning after waking from an uninterrupted, good, but not refreshing, sleep.

Thus, if her husband did not notice in the morning that she closed her eyes again shortly after waking, and, at the same time, sighed once deeply, and at this very moment did not at once shake her shoulders with both hands, and call to her aloud, then nothing would arouse her from the motionless and insensible condition, lasting from one to two hours, in which one could raise her arms and legs in any direction without their returning to their former position. These attacks had come, and still came and went without any known cause, but they left behind them no further ailment.

As regards the *concomitant circumstances* to these pains, I learned that the headaches were always much more violent *in damp weather* than in dry, and, in fact, her general condition was aggravated at such times, so that this woman, who was previously lively and joyful, became more and more melancholic. The many physicians who had been consulted, the many cures which had been attempted for her, and especially *all use of baths* increased her sufferings. I further learned that her headache especially, even aside from considering the influence of the weather, was most violent in the afternoon or evening; that consequently it increased in severity, irregularly, though *periodically*, which also pointed to an affection of the nervous system; that she constantly suffered from *chilliness*, hence the whole winter through, was obliged to keep her room very warm, and even in summer had *cold hands and feet*, notwithstanding all her clothing and other means for keeping warm.

Whoever has read the foregoing will have no doubt that here we had before us a disease in a *hydrogenoid* constitution, which latter must be extirpated first of all, without regard to the organs affected or the other parts of the organism; for as long as the general conditions of a disease are not removed, no thought can ever be logically entertained of the cure or improvement of its special form.

I often read in the Homœopathic journals clinical cases by physicians whose treatment, contravening this logical principle, was followed by little good results, or less than that which really was attainable; while, by virtue of the law of similarity, other physicians

again were led to the right indication, though this principle was unknown to them. This is, then, an involuntary logic of the Homœopaths, as a counterpart to the involuntary Homœopathy of the physiological school.

I know full well that, unhappily, few Homœopathists trouble themselves about the physiological significance of remedies, but, in the choice of their remedies, they are all the more uncertain, inasmuch as our drug-provings still require complements.

In brief, among all the remedies which might be indicated according to the law of similarity, for this case, which, certainly, was not easily to be cured, there were mainly two of which I knew, at once, from many years practice, that they not only produce a more active interchange of substance, and hence would occasion more warmth in the body, and would not only restore again the lost power of resistance against the influences of cold and moisture, but would also have an enlivening effect upon the nervous system, viz., *Nux vom.* and *Ipecac.* I have also observed that each of these remedies had far less effect, in these directions, when given by itself, alone, than when they were permitted to operate upon the organism in succession. §. 243.

I hence ordered *Nux vom.* 3rd to be taken at 7 or 8 A.M. and at 6 P.M., and three or four drops of *Ipecac* 3rd every two hours during the day, although it was the fervent desire of this patient to be delivered as soon as possible, first of all and at any price, from the headache, which tormented her without ceasing, for this was the most annoying of all her sufferings, and hindered her most in her duties.

Had I sought to conform to this wish I should surely have had to select quite other remedies, and probably a long series of them in succession, and most likely too, with no favorable result or no result at all.

Hence I told the patient that I could not meet her wishes at once, but, on the other hand, promised her, with all assurance, the complete restoration of her health, and, within the space of a year at the furthest, a deliverance from all her sufferings; adding that before her headache could be relieved, she would first have to notice a greater sensation of warmth in her body. Besides, I forbade her coffee, any baths for more than five minutes, and, for the time being, her accustomed washing in cold water; also her remaining near water, especially standing water, besides, of course, vinegar, fruit and fish.

This was on the first of May. I visited this patient every eight days, having told her to take the remedies as directed for eight days, and then to set them aside for eight days, and so on.

On the 4th of June she stated that she really thought she was not so cold as she had been for many years, for she could now sit even in the shade in the garden, a thing which hitherto had been impossible to her. At the same time the cataleptic attacks had so diminished in intensity, that she often had only a mere intimation of them. But headache and palpitation of the heart still unfitted her for all occupation.

The cataleptic attacks now happily returned but seldom for several weeks, (except the merest indications of them), and even the headaches were no longer aggravated in the evening, when, at the end of July, her children got the measles, one after the other. She would not entrust the care of them to anybody, but was unspeakably happy that she could sustain the bodily exertions and mental excitements, thereupon attendant, which a month before would have been utterly impracticable.

During the whole course of her children's sickness I naturally intermitted the use of the Ipecac and Nux, and only gave her Aconite occasionally, as she was very much alarmed at the condition of one of the children, whose disease had become very severe.

After this had all passed off, without injury for the children, as well as for the mother, the whole family went for eight days into the mountains of Bavaria. This agreed very well with all except the mother; for she *took a sail upon a lake*, which I had expressly forbidden, and, after this day, felt chilly and cold again, the headache, also, being notably aggravated.

As I had found in my practice that *Aranca diadema*, still more than Nux and Ipecac, diminishes the influence of hydrogen upon the system, and since it was also indicated, according to the laws of similarity, by the constant chilliness, I directed her to take 4 or 5 drops every two hours.

The warmth of the body soon returned, and, for the first time, the menses waited the full four weeks, but were more abundant and of a red color. It is a pity that, in other cases, the *Aranca diadema* produces very violent hæmorrhage, especially from the lungs, which fact calls for caution in the use of this great remedy.

After two weeks, the patient noticed a marked relief of the headache, which had returned; and, after eight days, this headache entirely ceased again for some days. The cataleptic attacks had already entirely disappeared for about fourteen days, and, since then, have not returned. But it was not till the 13th of September that the patient finally assured me that, in the most striking manner, just as if she had

been delivered from a bad habit, she had not had the slightest sensation of headache for four days.

Nor has it ever returned again after the lapse of six years.

After another fourteen days, during which time the patient had personally superintended the removal from her summer residence to the city, a thing which before was not to be thought of, she called my attention to the fact that, after having been in the city three days, she had experienced increased palpitation of the heart again, as had been the case every year after this change. Now, I gave her Puls. 30th, since the constitutional conditions for the previous ailments were all removed, and, as the favorable effects of this began to wear off in a few days, I gave Puls. 3rd. This remedy, within the next six days, had the desired result, and the function of the heart became regular and remained so.

I now gave her, finally, Magnesia 6th, after which even her fluor albus diminished, and soon disappeared entirely, not to return.

Thus, at the end of November, of this year, this woman was perfectly free from all her sufferings of years' standing, and without complaint. She went into society again, and has renewed her youth.

From the above rule and a large experience, I know that neither Puls. nor Magnes. sulph. would have afforded relief so readily, had not the constitutional treatment preceded.

In conclusion, I remark that, besides the symptoms of *Aranca*, already known, and the above-cited symptom as regards hæmorrhages, the following have also been obtained from a proving upon a healthy woman. In both ring and little fingers, of both hands, a feeling, as if they had gone to sleep and of formication; periods eight days too early, too strong and too copious; at night, immediately after lying down, sudden, violent pains in the teeth of the whole upper and lower jaw.

§. 330.

A pupil of the Academy of Arts, 23 years old, sent for me because he could no longer pursue his art with love and pleasure; he felt himself constantly so oppressed in the chest, that a walk across his room, even, put him out of breath. He attributed his trouble to an *intermittent fever*, acquired in a university city some months before, which was removed by very large doses of Quinine, of which he often had to take twenty grains at once. Since that time, *an enlargement of the spleen* had remained, which reached to the space between the third and fourth ribs. At that place, a dark line, made on the skin

with Arg. nitr. by the professor, the ordinarius of the City Hospital, to mark the outlines of this enormous swelling of the spleen, was still to be seen. Below the first line, there were other reddish marks, the traces of similar outlines, which had indicated the gradual swelling and ascent of the spleen. The heart was pushed to the right, and beat feebly and 98 times in the minute. The respiration was very short, raised the right side of the thorax only, occurred 30 times in the minute, and could be heard at the very apex of the right lung only.

The appearance of this young man of course indicated disease of the spleen, and the upper edge of the spleen was found again between the third and fourth ribs, though in consequence of earlier improvement, it must previously have stood lower.

As soon as I entered the house where he resided, and which stood *close to the water*, I observed that *all its walls were very damp*. I was now convinced that I should find a disease-form arising from a hydrogenoid constitution, for such a house, especially when it is but little or not at all exposed to the sun, is very sure to harbor disease-forms of the most varied kinds, but which ought not to be treated, according to their names as they are laid down in the text books of special Pathology and Therapeutics, in which also their treatment is struck off after one and the same model.

Here, however, the disease was a relapse induced by the damp dwelling. On being questioned, the patient said that *he was chilly* day and night, although it was mid-summer, and *as often as it rained* had always felt worst; he also acknowledged that, especially during the past four weeks, during which time he had lived in this room, he had felt worse than ever.

Upon constitutional grounds, as well as upon the strength of the indication according to the law of similarity, there was no doubt but that the remedy indicated was *Aranca diadema*. He took it in the 2nd decimal, four or five drops every two hours, in a spoonful of water.

After eight days the upper border of the spleen was behind the fifth rib, and fell, within three weeks, to the seventh rib; the heart returned to its place again; in the part of the lung which had been compressed, the respiratory murmur was again distinctly to be heard, and the patient felt himself well again. Nevertheless, I advised him to continue the remedy some time longer. Some days after, however, he complained of acute pains in the teeth of the upper and lower jaws, which had appeared for two days, whenever he retired at night, and which lasted an hour.

In this case, it was truly enough an accident that I had already learned this symptom of *Aranea* from provings. Yet this case serves again as an example of the diagnosis of the so-called Homœopathic aggravation; of a diagnosis which is always justified upon the basis of drug-provings. Not a single adherent of the physiological school possesses that acquaintance with the effects of his remedies which could explain to him similar aggravations. Even this important condition, for the frequent elimination of the accidental at the sick-bed, is utterly unknown to the physiological school, and is one of the causes of a host of mistakes.

§. 331.

The physiological school has collected some very valuable facts regarding the relations of the water in the atmosphere to that of the organism, but it still does not know of what benefit they would be for its Therapy, for it lacks the knowledge to find remedies against diseases from a surplus of hydrogen in the organism, and by the inventive maxim under which it institutes its experiments, it will never be led thereto. Thus Flemming declares in his treatise: "zur Lehre der Krankheits-ursachen:" on the doctrine of the causes of disease.

"The lungs exhale an air saturated with hydrogen gas of a temperature of $37\frac{1}{2}^{\circ}$ C., 30 R. If the surrounding air, at a temperature of $37\frac{1}{2}^{\circ}$ C., were saturated with hydrogen gas, then as much hydrogen gas would be offered to the organism through the lungs as is given off. But, since this is not the case, the blood in the lungs gives off to the dry atmosphere, determinate quantities of water.

Still greater is the interchange through the skin and the excretion of water by the kidneys. The exhalation of water through the lungs amounts, on the average, in twenty-four hours, to 364, by the skin to 720, the discharge of water through the kidneys to 1369.3 grammes.

The mean proportion of water in the healthy organism is 79 per cent., while there are large numbers of individuals whose blood contains more water, and others whose blood is richer in solid constituents. The cause of Chlorosis is scanty excretion of water from the organism, together with a mode of living which allows of the formation of few solid constituents in the blood. The scanty excretion of water is produced by living in an air relatively damp, by too little bodily exercise, and by deficient expansion of the lungs.

The tumor of the spleen has developed before the outbreak of the intermittent, and is the cause, and not the effect, of the febrile attacks; the enormous perspiration produced by the paroxysms is the attempt

of nature to remove the fundamental cause of the watery character of the blood and the swelling of the spongy body of the spleen therefrom arising."

Very good indications for practice, which, however, Homœopaths alone know how to make useful, or would Flemming, in spite of his expositions, have known how to point out the properly indicated remedy in a given case? Certainly not, and for this very reason, that, in the *Pharmacopœia* and *Materia Medica* of the physiological school, the *Aranca diadema* is not even mentioned.

§. 33².

For many years I have known a vigorous young man, of herculean musculature and form, with a most blooming countenance, and cheerful temper. After a few years I saw him quite as powerful as ever, it is true, but laboring now under *mental depression*. As I fear nothing so much as to appear obtrusive, I could not ask him any further questions, especially as he had assured me, in reply to the usual inquiries, that he was very well. A few years later, again, he came to consult me about certain attacks, which alarmed him very much, although he had already consulted, on this account, several of the most celebrated physicians, and had received from all the same assurance, that these attacks had all the less importance, *as they always disappeared of themselves, very rapidly and completely*, in short, that they were no object of medical treatment.

The sum and substance of the whole complaint was, indeed, trifling enough to the ignorant, and was as follows: "Within a period of three years, it has already happened to me three times, when in perfect health, and the last time, three days ago, that, when walking, I am *suddenly taken with such an acute stitch* in the left hip, as utterly disables me from walking further, because it is then absolutely impossible to stand on that foot, since it becomes so weakened that it is utterly incapable of furnishing any support. This stitching pain is so severe that *I think that, for the moment, I shall lose my senses*, and must fall to the ground every moment; that I am sure that I could not bear it, if it lasted but a minute; the pain of having a tooth drawn is child's play compared with it, and no words can describe it. But the strangest thing is, that, in the very moment when it seems as if I must succumb to it, *it disappears, without leaving a trace, just as suddenly, and apparently just as much without cause, as it came*, after having lasted, according to my calculation, two or three seconds, and I can at once go on my way as if nothing had happened. Before

and after it I am quite well; but the dread of never being secure against this most fearful of all pains, for a moment, does not allow me to rest till I find help, and indeed I am all the more disquieted by it, as, the last time, the pain was not only in the hip, but at the same time reached to the knee joint." This symptom was already known to me as a precursor of sycosis in a high state of development, and, although the patient assured me that he had always been quite well, I had him undress himself, and found upon his chest the characteristic exanthem which he made very light of, since now it broke out mostly in the spring, now soon disappeared of itself, while, during the *whole summer and winter it was not to be seen*, and he thought it was to be attributed to the time of year. On further inquiry, I learned that, three years ago, a friend of his, a physician, had touched some *whitish-blue spots*, which he showed him, *on his lips*, with Nitrate of silver, whereupon, after a few days they disappeared and have never reappeared since. Moreover, he was often overtaken with such a disgust for life, that he had to summon all his moral force to refrain from shooting himself, though he did not know any other cause for this than a disheartening disgust for life. Beyond this I could learn nothing, and, as regards any results from sexual intercourse, he never, as he assured me, had observed any whatever. We know very well how little we can credit such statements. In the meantime, it was not essential to know whether such a cause had existed or not, for, according to the preceding paragraphs, a pathological form is always the *combined result* of causes and conditions; hence, the specific disease-form according to time, place and circumstance, is *the only object of Therapeutics*. For the sake of curiosity, I examined a drop of blood, which, however, presented no more colorless corpuscles than is customary in non-leucæmic blood.

It had been long known to me that, at the outset of the so-called sycotic cases, *the percentage of water of the blood is increased*, as also in the later stages, in which Virchow had discovered leucæmic blood. It was likewise known to me that Glauber's salts protected the red blood-corpuscles from the influence of an excess of water, while in Brüninghausen, Handschuch, Wilhelm, Klinge, etc., I had men before me of great powers of observation, who were in favor of treating syphilis with Glauber's salts, but who are long ago forgotten, because sycosis and syphilis were confounded, and there was no indication in the latter disease to give Glauber's salts, and indeed it never accomplished anything. Thus both theoretical and practical experience sustained me, which left no doubt in me that Glauber's salts were indicated for this case also. I did not acquire certainty, however,

except through the Homœopathic proving of Glauber's salts, likewise known to me in so far as this, that no other remedy belonging to this category, possesses these relations to the hip and knee joints, in connection with the other circumstances, as do Glauber's salts. To estimate the results of the Homœopathic drug-provings, requires more physiological knowledge indeed, than many a one supposes. Without hesitation I prescribed for him the 3rd decimal attenuation of Glauber's salts, five drops to be taken every two hours. Since prescriptions, which are based not only upon theoretical and practical experience, but also upon the law of the specific direction, etc., can never fail of success, so did the result not fail in this case, although it required nearly a year, and, to guard against super-saturating the system, the remedy was often set aside for weeks together. After this period, however, there was no trace of the exanthem to be seen, the previous cheerfulness of the patient, as well as his blooming complexion, had returned, and since he has now passed five years in this desirable condition, without further use of the remedy, and without complaints, I may consider the cure to be complete.

§. 333.

In §. 295 I presented a case from Virchow of swelling of the cervical glands 20 centimetres in circumference. I have at present under treatment a similar case, with such a circumference about the neck, that one would think that the head were sitting right upon the shoulders, without any neck at all. The patient is a woman, fifty-one years of age; for five years past she has sought aid from medical notabilities and Professors of Universities, and received from them, as long as the swelling was only of the size of a walnut, Iodine, Salts of *Krankenheil* and cod liver oil in enormous quantities. But after the swelling had grown, without being checked, to this monstrous size, then their medical knowledge came to an end. The patient's blood was leucæmic, it is true; the tumor had already extended itself upon the face, upon the chest, into the axilla, and even the right leg presented rows of knotty tumors. But the Professors did not examine her blood, though they employed auscultation and percussion upon the tumor with the greatest care; the woman, however, could never find out exactly what ailed her, as the question was always followed by a shrug of the shoulders. I gave her Glauber's salts as above, and, after this, the tumors ceased to grow, and that on the neck went down, in six weeks, from 28 to 23 centimetres in circumference. The improvement made rapid progress; the swelling of the face had dis-

appeared and had made way for a healthy color; even the pressure upon the trachea, which troubled her very much, was no longer noticeable.

Although this woman, as I heard, was soon after taken sick from catching cold, and died therefrom in a few days, yet the fact remains that this sycotic tumor rapidly decreased, a result not to be reached by physiological medicine, as another case shortly after satisfied me.

That there are remedies and means enough based upon *natural laws*, to furnish aid in such cases even, is fully demonstrated.

These ways and means, according to natural laws, are, however, not to be found in the dominant physiological medicine, but simply and solely, as I have now abundantly shown, in Homœopathy. The minimal dose, also, is necessary to such results. If one, on account of the ineradicable association with traditional doses, scorns to prescribe the quantities *calculated according to the law of reciprocal action*, and prefers to remain subject to accident, he is not interfered with by the laws of the Government, and he may attempt to accomplish it by solutions of Glauber's salts, which better correspond to his power of comprehension; he will not succeed, however, even if he does not prescribe doses so large that the injurious casual effects of the Glauber's salts in substance, diarrhœa, for instance, occur, and I would then no longer answer for the result. In many other cases, larger doses even, than the so-called homœopathic, may lead to the desired end, as we observed above in consumption, and, in some disease-forms curable by *Nux vom.*; they may occur in spite of the treatment, if the superfluous quantity is changed and carried off by the stomach and intestinal canal; but such a treatment is ever uncertain and irrational.

§. 334.

A married woman, twenty-nine years of age, suffered from a cough for eight years, without any known cause, the cough having every year terminated in pulmonary hæmorrhage. Four years ago, she had, for six months, pains in the face, on the right side, which would yield to no medical means of the physiological school, though these pains ceased, of themselves, after a change of residence; hereupon, however, *the cough, which, during the continuance of the pains in the face, had disappeared, returned again*, so that this woman became much emaciated, and had to drink Emser water at her own house, since, on account of her great weakness, she could not be taken to Ems. By this means, however, her strength was so far restored that,

next year, she was able herself to go to Ems, there to continue the cure.

After four weeks she *returned home no better*. Blood was always present in the copious puriform expectoration, and her physician, who only saw her every week or two, told her husband that his wife was incurable. She herself believing what the physician said of her hopeless condition, *became despondent*, and her condition sensibly grew worse.

She now thought of consulting me. Her husband requested me, after telling me everything, and after all hope of any improvement had been long given up, at least to make her a visit.

One cannot refuse even such a somewhat unreasonable demand. I found a woman in a great state of depression, always weeping, with marked mucous rattle on the right upper part of the thorax, and on the left side, as well as in the right, a clear sound on percussion, puriform expectoration, constant irritation to cough, under the sternum, *the menses, however, were not yet deranged, appetite and sleep good, pulse 72; the face was very pale, yet did not have the expression of the tuberculous*, and on being questioned she assured me that she had long ago observed that she always had *two good days and one poor one, and that only in damp weather did she suffer all days alike*; that she had told this to her physician many years before, but he had always said that it was irrelevant, as well as the circumstance that she always had *cold feet and hands*.

I could now no longer doubt that here a latent intermittent had existed for eight years, and the remedy which I gave, Chinin. sulph., a dose every two hours, had such an effect that, from the first day, the cough became less frequent, and, on the eighth day, had entirely disappeared. The patient soon appeared very happy, and gained in strength from day to day.

Since then four years have passed, and there was never any return of the cough, still less of any hæmorrhage, and the abnormalities on the upper part of both lungs could be no longer observed.

This woman, acknowledging that I saved her life, would have been long buried, as sure as the treatment of her physician of the physiological school, was a false one, because these physicians, on account of the knowledge which they have obtained mechanically, and of which they always boast as infallible, are not able, in such cases, to establish a proper diagnosis; for they cannot, and never could, estimate the circumstances accompanying any disease-form.

A married woman, 28 years of age, who gave birth to her last child some years ago, without difficulty, and who appeared to have no predisposition to any disease, complained that, for six months, her abdomen has been gradually enlarging to such an extent that every one had been congratulating her upon a new pregnancy, which, however, could not be the case, as she noticed none of the well-known indications of that state; she had her periods regularly every four weeks as usual, and only for a few weeks past had had a constant leucorrhœa. The abdomen was round and everywhere uniformly hard all around in a circumference of about six inches diameter, above the symphysis pubis; but it was entirely free from pain, even upon pressure. An examination showed a condition of the os uteri as in the fourth month of pregnancy. The os was high and directed backwards. Around it, in the bottom of the vagina, the same cartilaginous resistance was felt as externally on the abdomen, and this resistance formed the immediate prolongation of the cervix, and thus belonged to the womb. I have twice happened to observe a similar swelling of the womb arising from a dead fœtus; in one case the fœtus lay five, and in the other eleven months in the uterine cavity, without being expelled. In the first case, metritis suddenly set in, and during its course, which could not be mitigated, the separate bones of the fœtus were discharged one after the other through the rectum, which afforded great relief. The other case escaped my further observation. Both cases were free from doubt, by reason of the signs of pregnancy which had been manifestly present, and in the latter case, even the parts of the fœtus could be distinctly felt. All this was absent here; this swelling could also not be formed by the ovaries, nor could it be a case of hydrometra. However, I once found in the cadaver knotty fibroid tumors, which had been diagnosticated as such during life even, situated upon the fundus uteri, *i. e.* upon the outer wall, which had been considerably reduced in size by the saline springs of Reichenhall. These were easily diagnosticated by the touch on making an examination, and by the enormous hæmorrhages which they always produced during the first period of pregnancy. This also was not the case here, neither was there any muco-membranous polypus present, which surely, aside from its slight resistance, would have dilated the os uteri. Thus it could only be considered a fibrous polypus, or more probably, a round fibroid within the uterus, which, however, could not be affirmed positively, as the closed os prevented any further diagnosis. It is true, Virchow does not mention in his work, "über die krankhaften

Geschwülste," such forms of tumors in the uterine cavity, nevertheless, they have been observed by others, Kiwisch, for instance.

Owing to the size of this growth, an operation was not to be thought of, though, to the physiological school, any other resource is unknown. Consequently this woman would have been given over hopelessly, a prey to all the dangers which were to be anticipated in the case.

What now delivers us from such a dilemma? Nothing but the doctrine of Homœopathy touching the *concomitant circumstances*.

This woman *did not look sick, had a good appetite and slept well: felt otherwise well, only she became sooner and more wearied by her domestic duties than was previously the case*, in which duties she was very much annoyed by this tumor in the abdomen.

This was April 4th. The remedies which I administered, internally, so long as I had my eye upon the object of the disease alone, were attended with no success, and from month to month, the abdomen increased in size, till, unhappily, it was not till September 6th that I inquired about the concomitant circumstances. She acknowledged that she *felt chilly every evening, and worse, i. e., there was a more rapid enlargement of the abdomen, during moist weather*. On this account I prescribed Nux 3rd and Ipecac 3rd, in alternation, every two hours, and, with such effect, that, as early as September 26, the tumor had decreased in size to a diameter of three inches, though it could still be distinctly felt above the pubic bone. The cervix had also assumed a lower position, and, by the 20th of October, had become quite perpendicular again; the lips were somewhat swollen, but the leucorrhœa had also disappeared.

This improvement continued without interruption, during frequent suspension of the remedy, and four years have passed without any complaint from the woman, so that her complete cure was certainly accomplished.

§. 336.

A butcher and tavern-keeper, 25 years old, was taken, according to the declaration of his physician, with so violent a pneumonia, that he had no hopes of his recovery. The patient, however, was about to be married, and the business would have been lost to his betrothed by his death. His physician, hence, advised the patient to consummate his marriage as soon as possible. This took place; but now I was called to take charge of the case, a request which, of course, I thought I had a perfect right to decline. Yet I could not withstand their

repeated urgent appeals more than a day. I found hepatization of the whole right lung from the lowest part to the apex, where, above the clavicle, the sound on percussion was somewhat hollow, and there was some respiratory murmur yet to be heard. The left lung had remained free from any affection; there was great difficulty of respiration; excessive debility; the voice harsh; the patient could not lie on the left side without danger of suffocation; pulse 130; the cough brought up purulent, yet scanty, expectoration, the tongue was thickly coated, the appetite was entirely wanting; there was great emaciation, features collapsed.

Upon inquiry, the patient stated that *one day he was better — on the next decidedly worse, and then, at 8 P.M., he was worse than ever*, so that he really thought, the evening before, that his time had come; he *felt chilly* also, notwithstanding the constant sweat, and in spite of the warm cloths upon his abdomen. I directed Nux vom. and Ipec. in alternation, every two hours; on the next day, August 2, amelioration of all the symptoms. After eight days he *still was chilly in the upper part of his body*, hence *Aran diad.* 3rd was given, in hourly alternation with Nux, although the hepatization decreased from above downwards, more and more every day. On the 29th of August he was already able to remain two hours out of bed, for his appetite had returned in the first days of my treatment, and hearty food was given as his strength increased. He now felt quite well; the whole right lung was again serviceable for respiration, and, in the same proportion, the burden of the other ailments was also removed; his bodily weakness, however, was still considerable. This day the young wife of the patient stood at the door of her house as her previous physician passing by, inquired about her husband. She replied, with a joyful countenance, that he was entirely well and already up. To this the doctor replied, “that is utterly impossible.” A week later, however, the butcher, convalescent, walking out of doors, met the doctor himself, and gave him an ocular demonstration of what he had declared to be utterly impossible.

§. 337.

After opening an abscess on the left heel of a man 75 years old, the edges of the wound mortified, and the physician declared that as gangrena senilis had set in, the foot must be removed. Upon this decision I was called in. For more than a year I had often seen this old man in the street, limping with his left foot, and now I saw clearly the cause thereof, viz., a chronic inflammation of the periosteum of the

os calcis, which had probably extended to the bone itself, and a gangrenous ulcer half an inch broad, causing insufferable pains, and surrounded and partially covered with, a gangrenous crust. Arsenic 10th gave prompt relief. The gangrenous crust was thrown off. The surface of the ulcer took on a healthy appearance, but, after ten days, did not show the least tendency to cicatrize, although the pains were decreasing. Both Silic. 10 and Calc. carb. 6 aggravated all the symptoms so far as this, that none of them were improved, but the ulcer had increased in breadth and depth, so that the probe could now touch the denuded and carious os calcis. The patient wanted his first drops again, because they had relieved his pains, which now had returned to their former severity. This was granted him in the absence of any better indication. But the sleeplessness setting in, which could be attributed only to the influence of the Arsenic, required that this remedy should be discontinued again. His sleep now returned, but the pain increased again also.

A thorough examination finally led me to the source of all his troubles, to which indeed the striking effect of Arsenic had already called my attention, as this remedy was given only to arrest the mortification. The patient acknowledged, on being questioned, that his *pains increased and decreased periodically*, and that, regularly, every other day. He added that he might have told me that long before, had he supposed that any importance could be attached to such a trifle; he had thought that quite as little importance was attached to the circumstance that he *was always cold*, and hence was always trying to get warm.

Arañea diadema removed the pains, and effected a rapid cure. At first, the ulcer grew less, then many very small sequestra were thrown off, but five months passed away under the repeated use of this remedy, before the cure was complete.

I avail myself of this opportunity to call attention to the use of hay-baths in many forms of caries, and in enchondroma of the bones. It was in the country that I first learned of these baths as a popular remedy for necrosis of the bone. If what the country people related to me is true, then it can only be the Silix contained in these baths which makes them useful in these diseases of the bones. Hence, I examined the hay chemically, in order to learn whether Silix could be found in solution in these baths.

Three drachms of finely cut hay were put into twelve ounces of water free from silicious acid, and boiled down half. The filtrated decoction was evaporated to the thickness of an extract, and then rapidly incinerated. The white ashes thus obtained were digested 24

hours with Hydrochloric acid, which left about half a grain of residuum, which presented all the characteristic properties of Silix; hence Silix is present in a state of solution in the hay-baths.

§. 338.

A young married pair had, two years previously, lost a child from hydrocephalus acutus; the second, then eight months old, was committed to my charge, when the disease had already reached the convulsive stage; it died after a few days.

It devolved now upon me, as the family physician, to solve the problem of protecting the next child from this disease, and thus to remove the *conditions* under which, both times, the development of this fatal disease had been possible, a problem which everybody knows the physiological school is not able to solve.

Both parents were perfectly healthy, and never sick. Both had blonde hair, thin skin, and blue eyes. The husband was spare, the wife of a full habit. Hence no positive point of support could be gained from either. The wife, however, had nursed both of the children, but without possessing sufficient nourishment for them, as I learnt on inquiry, for she was obliged to give them milk, and sugar-water besides, and both children were taken sick when they began to *cut their teeth*.

In hydrocephalus the nutrition of the bones is always deficient, and hence, during the period of dentition, this nutrition must be carried on at the expense of other tissues. But the conditions of this deficient nutrition of the osseous system must have been given long before the period of dentition.

I hence stated to the wife that she must not nurse the next child, and that she must, during her next pregnancy, take Sulphur 6th one day, and Calc. phosph. 6th the next, so that she should not lose a third child by this disease. Sulphur, I wished to exhibit as a nutritive remedy favoring the formation of tissues, while Calc. phosph. was to favor that of the bones.

Five weeks later, the woman informed me that she was again pregnant, and asked me for those remedies. She was delivered at term, and this child, now five years old, remained healthy, as well as a second, now three years old, which was carried the regular term under this prophylactic treatment.

These are not solitary cases, for I have pursued this method, for six years, in all families in which there has ever been a hydrocephalic child, and with the same good result.

But where I have taken charge, in other families, of children who had already suffered from hydrocephalus, none have died during the last seven years, in which time I have given such children, every morning and evening, a powder of the second trit. of Calc. phosph.; and only such children as I first see in the last stage, receive morning and evening, a few drops of Argent nitr. 6, and every two hours the powder of Calc. phosph., and with the best result. At the same time, I have repeatedly convinced myself that, in such cases, one of these remedies alone, affords no such relief.

§. 339.

In September, 1861, I received from a well-known Homœopathic physician, the following letter, which I give *verbatim*:

“I hope you will excuse me for taking the liberty of relating my disease to you, with the request that you will kindly give me the benefit of your medical skill in the case. I can hardly think that I have made a vain request, as you will learn, at least in part, from the following description of my situation how much I am in need of help:

I am 53 years old, of nervous constitution, and have suffered with piles since my youth. I have employed all sorts of remedies against these, with but transient result. Subsequently, a hypochondriac mood was superadded. Homœopathy and the water-cure have given me but little relief from my sufferings. My manner of life, since my youth up, was much like that of others. I drank two or three glasses of beer nearly every day, smoked tobacco, and partook of the ordinary fare. Married at 23 years of age, I became the father of eight children, quite healthy and vigorous. I was never syphilitic, rachitic, or scrofulous, but, when a child, was affected with the itch, which, perhaps, was checked too soon, by means of ointments. Although I was never excessive in amorous indulgence, yet I always observed a pressing pain in the testicles after coitus, which was more violent as the coitus was more frequent, and *vice versa*; it was aggravated when standing, but relieved by walking, and still more on lying down. This, perhaps, may have its cause in youthful sexual sins.

My hæmorrhoidal pains, which were especially severe in the years from 30 to 40, tormented me after every stool with their burning pains as if the parts were raw. Later in life, this pain disappeared, and the hæmorrhoidal knots were swollen, only when I drank a glass of beer too much of an evening. There was very seldom any discharge of blood, and it was only after having used cold sitz-baths and

cold injections for several years, that there were repeated hæmorrhages after stool, without affording any essential relief.

I am very nervous, and hence could never use the sitz-baths under 16° R. since, if used *in a lower temperature, febrile attacks were always induced.*

In 1859, an acute burning sore pain appeared again after every stool, as well as protrusion of the hæmorrhoidal tumors. The pain, after stool, was very severe, and sometimes continued for hours. As no remedy afforded me any relief, I determined to adopt a vegetarian diet. Accordingly from the beginning of September, 1859, I avoided all animal food, drank no beer, denied myself smoking, and every irritant. My breakfast and supper were bread and milk — my dinner consisted of vegetables, and dishes made of flour and milk; my drink was water; as a consequence, I strictly resisted the greatest longing for meat. Now and then I took a dose of some Homœopathic remedy, of which Calc. carb. and Sepia 200, operated most beneficially. In connection with this, I practiced gymnastics, every day, according to Dr. Neumann's directions in his 'Hausgymnastik.'

My sufferings were more endurable, it is true, and yet the hæmorrhoidal pains, after stool, still troubled me very often, and a melancholy mood set in, which I might describe as a feeling of an undeserved injustice done me, associated with a peculiar sense of pressure in the throat, and which was especially noticed on walking in the open-air. Amid such a state of things, I observed, even in the previous winter, now and then, that I was easily wearied after a long-continued walk, and my friends wondered at my careless gait, which, however, was only to be observed every time after a longer walk than usual.

Last spring I became accidentally acquainted with Baunscheidtismus, and got possession of Baunscheidt's book. The great recommendations of this method against hæmorrhoids and hypochondria soon aroused a desire within me to try it. Hence I proceeded at once to carry out my plan, and applied the instrument, with intervals of ten days, upon the back, the sacrum, the whole circumference of the abdomen, on the outer side of the thigh, on the calves seven times, and it was used the last time seven weeks ago.

The result, however, is very sad; for after the fifth application, the left axilla swelled up and became painful. Soon after, I got an ulcer on the outer side of the thigh, and one on the left forearm, suppurating for a long time. There developed a reddish, knotty eruption, spreading over the whole body. The tubercles, of the size of a small lentil, are, in many places, so elevated above the skin that they resembled wart-like excrescences. These have their seat chiefly upon the vertex,

above the ears, on the forehead, on the left side of the neck. between the scrotum and the right thigh, and scattered here and there upon the penis and about the anus. Small scales form upon them, they itch but little, and, after being scratched, the itching is relieved. At the same time, about the third rib, on the left side, near the sternum, there was a swelling, painful upon pressure. My knees became stiff, so that I could go up stairs only with the greatest labor. There appeared, besides, an oppressive weight upon each shoulder, with sensitiveness thereof to pressure. Great sensitiveness in separate small portions of the thorax, aggravated by drawing a deep breath and by eructations, but soon disappearing again, now frequently annoyed me much. The most distressing pain, however, was a rheumatic, throbbing, tearing pain in the head, which disappeared entirely, perhaps upon the use of *Merc. sol.*, *Nux vom.* and *Bryonia*. In short, after this *Baunscheidtismus*, as I think, a rheumatism developed itself, which has lasted now for about six weeks.

To give a more exact detail of my disease, I take the liberty of describing my present condition as follows:

Rheumatic tensive pains on the left side of the neck. Pressing pain on the shoulders, with sensitiveness of the top of the shoulders to external pressure. Pain, as of dislocation, in the shoulders and arms on raising the arms. Painfulness of the bones, especially of the left hand, so that I can hardly grasp and hold a small weight, a book, for instance. Painfulness of the third rib on the left side upon external pressure. Redness and swelling of the skin over the point of the right elbow. A slight jar with the hand upon a firm substance produced, some days ago, a dull humming pain in the hand. Painfulness of the spinous processes of two of the lumbar vertebræ, upon pressure (at present one only being painful.) Painfulness in the right elbow joint, and on the upper part of the right arm, especially when turning the hand outwards. Paralytic weakness (and paralytic pain) of the legs, especially of the right one, with painfulness of the knee-joint on extending and flexing the leg. When sitting on a chair I can raise the right leg only by keeping it extended. Raising the leg while the knee is bent is impossible on account of pain in the knee-joint; weakness of the knee-joint when walking in the room. Sitting down or rising from a sitting posture can only be accomplished by the most powerful support of the hands. Going up stairs is impossible. Painfulness of the heels, especially of the left one, when rising and afterwards, and on beginning to walk. Redness of the uvula and *velum pendulum palati*, with pain in the throat, especially on empty swallowing (this is much better.) A red tubercular eruption about the anus and

between the right thigh and the scrotum, almost like warts, raised above the skin, itching but little, and especially at first, on the forehead, now on the vertex above the ears, on the left side of the neck and upon the front of the chest. Furuncles on the right arm near the axilla. For a few days past, slight œdematous swelling of the feet. Respiration sighing. Pulse 90; weeping mood; doubtful of recovery.

I must add, moreover, that my pulse has always been rather accelerated, and that the pains seem to be seated in the bones and are aggravated only by pressure and motion, as well as that the upper ends of the shin bones, just below the knee-joint, are painful on being pressed. The urine I have never examined. Sour smelling night-sweat.

The above symptoms have set in since the use of the Baunscheidtismus. But, in order to give you a closer insight into my disease. I will also give you those symptoms which have annoyed me for a long time and are now present.

Confusion, humming, heaviness and fullness of the head, glittering before the eyes. Roaring in the ears, mucous rattling. Heat in the mouth. Bad breath. Appetite and digestion good. Protrusion of the hæmorrhoidal tumors at stool. Burning and soreness at the anus, after stool, aggravated on walking and relieved by sitting and lying. Cracking of the joints; sense of swelling and difficult motion of the fingers, aggravated when walking in the open air, and in the morning in bed. Powerlessness of the hands when writing; writing is very difficult for me. Hardness and thickening of the skin upon the ball of the left toe, with pain when walking on the pavement, as if I trod on small stones. Easy perspiration; sour-smelling perspiration. Sensation as if a fibre were torn or snapped off suddenly at the left axilla. Aching in the testicles after coitus; relieved by sitting, still more when lying down. Pain in the groin from the pressure of the truss, which annoyed me very much since the Baunscheidtismus, although I have not worn the truss for fourteen days. (at present relieved).

Against this complaint I have already taken Merc. sol., Nux vom., Bryonia, Tart. stib., Sulph. and Colchicum. I have now taken Rhus, since September 7. I have taken two drops of this in the 2nd dec., repeated at first every six hours. Now, September 21, I take a dose only morning and evening. As a result, I may say that the pains in the throat, in the left hand and in the left groin, and the eruption, are somewhat relieved. A striking result, such as I have often seen in my practice, I do not observe.

I am father of seven children, yet unprovided for, without means, and the support of my large family depends entirely upon the earnings of my practice. Hence my situation, at present, is truly a sad one, and the future looks still darker, since I fear that my lower limbs may yet become entirely paralyzed."

Now follows a repetition of the request made at the outset, with the usual form of closing.

No expert will doubt that, for this disease, the physiological school has no name, and since it has none, it hence cannot say what is really present here, and at most could recognize as special troubles, hæmorrhoids, paralysis, etc. To establish a constitutional diagnosis is hence impossible for it, consequently it could make neither a rational indication nor prognosis.

According to the newest and best work, *i. e.*, best in the sense of the physiological school, the work of Dr. Eisenmann, entitled "die Bewegungsataxie, [Locomotor ataxy,]" the symptoms, pains in the testicles after coitus; fatigued easily; tottering gait; impossibility of raising the leg in a state of extension, while sitting upon a chair, or of going up stairs, or of sitting down or getting up without the most powerful support of the hands; difficulty of motion of the fingers; loss of power in the hands when writing, and of the left hand, so that he can scarcely hold or raise a book; paralytic weakness of the legs; weakness of the knee-joint when walking; pains in various parts of the body, and melancholic mood present a picture of disturbances of co-ordination of the muscular activity, and hence are "the essential therapeutical tokens of muscular ataxy."

But Eisenmann's "well-arranged curative plan," is very short for 238 pages full of pathology, and consists in this: 1. To remove the causes of the disease, which may yet be active. 2. To "resist" the morbid diathesis, produced by the morbid causes, whatever they may be. 3. After "resisting" the morbid causes, to lead back, to its normal state, the functions of mobility, by a suitable but "cautious" exercise, especially by rational gymnastics.

But now the physiological school knows neither the morbid cause for this case, nor the diathesis of the disease, and the rational gymnastics had already been used in vain, consequently, here also, the science of the physiological school would be stranded upon the sands of its ignorance.

Regarding those "resistances," ["Bekämpfungen,"] Eisenmann says: "Hydriodate of potash does not do it, Cod-liver oil will not do it, at least, in a case of *Tabes dosalis*, where it was plentifully used, I saw no benefit from it, only the chronic pains in the

joints disappeared. Whether Arg. nitr., Merc. corros., or Arsenic will do it, who can say?"

This is the wisdom of Dr. Eisenmann, in his own very words.

And what can I do with this advice of the physiological school towards curing my patient? Surely the best thing is to give it to the winds, to waft it into the sea of oblivion.

None of these remedies, which were "experimentally" used, according to Eisenmann, as one would conclude from the interesting, but frequently very imperfect, clinical cases in his work, were indicated in the case before us, according to the law of similarity; hence for any subsequent experiment, even if Homœopathy would venture to make one, or were obliged, under stress of necessity, to make such experiments first upon the sick, these remedies are utterly useless, except for the wretched *empirics* of the physiological school.

For the doubters, this clinical case contains quite too few objective facts; it does not contain even Romberg's symptom, "that all who suffer from locomotor-ataxy, are unable, when in the dark, or with their eyes closed, to stand or walk without staggering and reeling;" nor is the analysis of the urine given. How could any one, in such a case, ever conceive of the idea of a diagnosis, or an indication, or prognosis?

For, the dogmatists of the physiological school, who, from principle, regard ocular inspection a condition *sine qua non*, and deny that without it a diagnosis, indication, or prognosis can be established, it would be necessary to make a journey to this patient, or to require him to make one to his physician.

Thus neither dogmatism, skepticism, nor empiricism could be called upon, and even if then already I had read Eisenmann's book, his therapeutics would have left me in the lurch.

On the contrary, after I had received this letter of September 23, 1861, and had reflected upon it, I wrote the patient, as follows:

"In your letter you have given me a very good description of the phenomena which are wont to accompany the development of sycosis, whether you have acquired or inherited it. Hence you will have the goodness, without delay, to take Thuja 30th morning and evening, as well as Natrum sulph. 3rd every hour; four or five drops of each, in a spoonful of water. At the same time, I earnestly beg of you not to practice great abstinence, nor to fast, for no form of sycotic disease can be cured without good food, without nutrition of the parts which remain healthy. Whether you are quite curable, I would rather leave undecided at present, but in any case you can be so far restored that

you will be able to resume your practice again," etc. The remainder does not belong to the history of the case.

Truly, this strict diet which, unhappily, many Homœopathists, from great misunderstanding of facts, insist upon even to this day, so that, to a sick man, actually nothing is left to live upon but the air, does by no means aid in the spread of Homœopathy, and indeed it is thus wantonly deprived of one of the greatest guarantees for its results at the bed-side.

I will now give: 1st. The symptoms which led me to this diagnosis, and: 2nd. What induced me to give two remedies in alternation, an abomination to orthodox Homœopathists. As regards the

1st. The following symptoms are above all characteristic of the sycotic form of this disease: Swelling and suppuration of the axillary glands, sores on the outer side of the left leg; tubercular wart-like eruption upon the above mentioned parts of the body; swelling of the rib of the left side, near the sternum; stiffness of the knee, the various so-called rheumatic pains; redness of the velum palatinum, with painfulness of the throat, especially on empty swallowing; pains in the bones; cracking of the joints; with all the symptoms above indicated under the modern idea of the locomotor-ataxy of Duchenne and Eisenmann.

The reasons why these groups of symptoms belong to the so-called sycosis, are given in previous paragraphs. As regards the

2nd. That according to this diagnosis, Thuja is indicated, needs no further discussion for those who are versed in the Homœopathic drug-provings. But Thuja, both according to these provings and experience at the bed-side, can not cure that tubercular, or, as our colleague expressed it, wart-like eruption; Natrum sulph. alone can accomplish that. But this tubercular eruption is just the most dangerous form of this disease. If not removed at once, it luxuriantly develops in many parts of the body, especially on the neck and in the region of the clavicle, and grows into great clusters, which the inexperienced confound with strumous and other glandular swellings, and mis-treat, although they occur in places where there are no glands.

An evidence of this I find in many patients who have sought, and obtained, help from me, not only after the injurious treatment of the physiological school, but also after unsuccessful Homœopathic treatment.

Herewith is presented another practical proof that the dictum, to give, under no circumstances, more than one remedy, is not always applicable. Of course, I am saying nothing of compositions, since they would lack the possibility of any naturo-philosophical application

arising from provings upon the healthy, or at least would need deductive confirmation, provided we were not minded, quite unnecessarily, to throw ourselves again into the arms of empiricism and the unscientific uncertainty of the physiological school.

Since our Homœopathic Materia Medica contains, as yet, nothing of this effect of *Natr. sulph.* (though as a remedy it is indispensable), I have, at the same time, given another example, that we may greatly expand and complete the Homœopathic Materia Medica, as well as the other doctrines of Homœopathy, by way of induction.

If, for instance, the provings of substances of the outer world on man produce symptoms of disease, which are similar to those which arise from the unintentional introduction of morbid matter, then they establish the well known indication, according to the law of similarity. This law thus rests upon synthetic comparison between the intentionally and the accidentally produced morbid symptoms.

By means of this law, however, we are not taught anything touching these various molecular substances themselves, and the relations of these molecular substances and their effects upon each other, and upon the counter-action of the organism, have clearly, in themselves, nothing more to do with the law of similarity; in both questions we have to do with two entirely different domains of science — of mind and of matter. These relations can be investigated and explained only according to the chemico-physical laws existing within the organism. Hence it is clear that the effect and counter-effect of a substance, which, as a remedy, is to exercise such an influence upon the motions of the diseased organism, that the latter should be again removed, must, as already has been said, be diametrically opposed thereto, without exception; for the remedies are expected, indeed, to change the diseased organism into a state which is in direct contradiction to it, *i. e.*, into a healthy state. This happens, in fact, demonstrably also, according to the indication from the simile, which is always and entirely a matter of the intellect, and relates only to the quantity and quality of the molecular substance indicated according to the law of similarity, and, to their material relations to those of the organism.

Now we can explore the chemico-physical motions, and counter motions, which remedies are wont to produce in the organism only by induction, and when we have thereby learned, for example, that *Natr. sulph.* diminishes the influence of hydrogen upon the blood, there follows in relation to the law of similarity only the conclusion that the symptoms from the provings of *Natr. sulph.* must be similar to those morbid symptoms which it can cure; that these similar symp-

toms would thus also appear in diseases which have arisen from increased influence of hydrogen, just as, for instance, from the surplus, as well as the deficiency of Iron in the blood, chlorosis may arise; the former we learn from our homœopathic drug-provings, the latter from pathology.

Since, finally, our Homœopathic pathogeneses cannot yet be looked upon as complete, and since, in the provings of *Natr. sulph.*, nothing is said about that tubercular eruption, while the sycotic disease-forms, however, are *always aggravated upon an increased influx of Hydrogen, in damp weather, from the use of baths*, etc., therefore such inductive discoveries upon the influence of substances of the outer world, upon the substances of our organism, must, in all cases, be of the greatest value, and especially where, for the time being, the Homœopathic *Materia Medica* cannot give us as yet the information; only, such discoveries, before they can be raised to a law, must be deductively confirmed also, and then only do they obtain practical validity.

No one can hit upon such diagnoses, indications and prognoses in the physiological school. This school occupies itself with the direct annihilation of morbid symptoms and products, just in proportion as, instead of drug-provings and induction, empiricism, accident and hypothesis seem to point in this direction, as I have abundantly demonstrated in my writings. And what would Eisenmann, finally, give us regards the case before us after his above cited elaboration, and on what grounds? He says “*Geheimrath*” Wunderlich had the “happy thought” of trying the Nitrate of silver “against” the locomotor-ataxy, which he calls progressive spinal paralysis—that is all! Are these the ways and means of a rational or exact investigation of Nature? Or did not this “happy thought” more probably originate with Homœopathy?

In contrast thereto I declare, in defiance of contradiction, that the effort to seek remedies also in an inductive manner, is really an advance in Homœopathy, which can and must be taken up without prejudice to the doctrines of Hahnemann; hence, as a progress in Homœopathy, which is far superior to the efforts of the physiological school; which, in the properly understood interest of homœopathic science, deserves to be generally recognized and held fast.

For the sake of brevity, I will no longer give, *in extenso*, the correspondence during the course of this clinical history, but only so much of it as appertains to the case.

October 16th. “The rheumatic tensive pain on the left side of the neck, the painfulness of the third left rib and of the spinous processes of two of the lumbar vertebræ to pressure, the reddish tubercular

eruption between the scrotum and the thigh of the right side, the sighing respiration, the tearful mood, despairing of a cure, the œdematous swelling of the feet, have disappeared.

The following symptoms are relieved: the pressing pains upon the shoulders, the painfulness of the bones of the hand on grasping and raising even small objects; the painfulness of the elbow-joint when strongly flexing it, the paralytic weakness of the left leg, in consequence of which it is somewhat easier to rise from a seat and sit down again; the reddish tubercular eruption on the head and neck, and the sensation as if in the right shoulder, a fibre were suddenly torn or jerked loose. Osseous distension of the left parietal bone along the sagittal suture, with less sensitiveness to outward pressure, which symptom I forgot to give in my last letter. The abscess on the right arm near the axilla, which broke once, discharged pus, then healed again, has now disappeared by absorption.

I must yet add that, in the morning, and during the forenoon, the pains in my legs are relieved, and that the swelling of the knees, especially of the right knee, has disappeared, and that my legs feel best while lying in bed. As I suffered, one evening, from a violent burning, tearing and itching in the painful eruption at the anus, I resorted to the external use of Thuja, by which not only was the pain relieved, but the condylomata also were reduced at least one-third.

I could not for a moment believe my complaint to be of sycotic nature, for, living 27 years in happy wedlock, I have always led a pure life; it would have been a bare impossibility for me to have indulged in sexual connection with any other woman.

One symptom, which I have had for many years, has become aggravated—a cracking of the ankle when stretching out the foot, so that I am obliged to keep the foot quiet in the joint, and have to lie down, whereupon the pain soon leaves. The roaring in my head and ears, which has become habitual, is also much aggravated. To this is added a dulness of the brain, which does not, however, interfere with conversation."

To the questions whether he should continue with his former prescription and might drink beer, I replied in the affirmative.

October 31. "The tubercular eruption has, for the most part, disappeared; the condylomata (?) at the anus are reduced to the merest trace. The painfulness of the metacarpal bones, on flexing the hand, has disappeared. The exostosis upon the left parietal bone is much improved, and the pains in the right ankle, when stepping upon the foot, have not been noticed for eight days.

Present condition. Difficulty of hearing, and roaring in the head and ears; painfulness of both trochanters and femurs when lying upon them. Weakness of the knees, as from relaxation of the ligaments; painful cracking of the right ankle when extending it; pain in the right heel when stepping upon it; painfulness of the shoulders, of the point of the right elbow and of the right index, and ring fingers on pressure; of the left os humeri when bending the arm backward, or when raising or extending the same. Sensation of stiffness and sleepiness of the hand, especially when resting on the elbow. Pains in the neck on bending the head back. Suppuration of the left axillary gland, which is still somewhat hard. Fourteen days ago, this was the case in the right axilla. Painful glandular knots in the groins and the anterior surface of the thigh, as well as on both sides of the neck. Difficulty of falling asleep; stools insufficient; apparent inactivity of the rectum when at stool, with protrusion of the hæmorrhoids and burning pains; blood when at stool; urine often interrupted, also with a double stream as if from stricture.

On the whole, an improvement in my condition cannot be denied, so that I indulge a hope again that I shall be able to resume my practice.

I directed him that, if there were any strictures in the urethra, they should be dilated, and that otherwise he should continue with Thuja and Natr. sulph.

November 10. "Two days after sending my letter, the pains in the throat, which had previously disappeared, returned again, and light gray ulcers with red edges presented themselves. In my anxiety I took, on my own responsibility, in place of Thuja, Lycopod. 200th, several pellets in ten ounces of water, a spoonful morning and evening. Glauber's salts I have continued to take. It is a great remedy. There is nothing worse for me than my own treatment. Since yesterday, I have taken morning and evening, two drops of Nitric acid, as the ulcers on the throat seem to be spreading again. I expect nothing whatever from Thuja. But the symptoms and pains of the leg are considerably better, as well as those of the upper extremities. My mind is active, but without application or endurance, and when reading I am dull and unobservant, yet am in good spirits again.

Years ago I tried to insert a bougie into the urethra, but was obliged to refrain, from too great sensitiveness of the passage.

I shall await your prescription, and this evening, if anything, take a dose of Nitr. ac. 200th."

I replied, "It would have been better if you had not taken Nitr. ac. and Lycopod.; they will do no good. Hold fast to Thuja and Natr.

sulph. Whatever may occur, there is no indication at all for any other course."

November 23. "To-day I can report a great improvement, for the pains in my bones are reduced to a minimum; the knee-joints are stronger, so that I can rise much easier from my seat, and that with the help of one hand only. The pain in the heel is much relieved, and, for many days, I have experienced such a sense of comfort that, while lying in bed, where I have otherwise been in the habit of reading, I give myself up entirely to this delightful sense of returning health, and do nothing.

"For several days there has been a feeling of some warmth and inclination to sweat, and after I had taken the first dose of *Natr. sulph.*, yesterday morning, I had a pain in the bowels, as from diarrhœa; after the second and third dose, there appeared, besides, trembling and fermentation in the bowels. My good appetite was entirely gone at noon; hence these were effects of the Glauber's salts, which I have now used fifty-three days continuously. Thus, for the present, I have discontinued the remedy. The next evening, there were heat in the right ear, chilliness and, when out of bed, a shaking chill, with increased thirst—pulse 104. At night, slight sweat and good sleep. Pulse now in the morning 116, otherwise I feel well. The sores in the throat have not spread any. Since I took *Thuja* again, the condylomata have disappeared to a mere trace. My tongue is coated white, the taste is flat; dryness and heat in the mouth; disgust for meat; this morning no colic; eruption on the forehead and head entirely gone. Since the urethra is no longer as sensitive as it was, I have undertaken its dilatation, and the symptoms of stricture have diminished. The urine passes easier, and there is but seldom a double stream. The urinary difficulties are also less; the stricture is seated far back, at the entrance of the urethra into the bladder.

"Till further orders, I shall suspend the use of the Glauber's salts, but shall continue with the *Thuja*, which I last took in the 200th (*Jenichen's*)."

To this I replied: "Since you are now saturated with the Glauber's salts, you should, as a matter of course, interrupt their use for about eight or fourteen days. But I should rather see you continue with *Thuja* 30th, for the 200th requires to be taken in longer intervals; otherwise you would have your blood over-saturated with it too soon."

December 24. "I have already taken *Thuja* 200th in longer intervals, but returned at once to the *Thuja* 30th (four drops), as soon as I received your letter. However, my regular morning stool soon became so hard that I took only two drops. For a few days the stools

were now easier; but soon after the same difficulties at stool returned again. The stool occurred now with the greatest effort, and was accompanied with burning sore pains, lasting all day, so that I was obliged to cease the use of the Thuja entirely, and, even at the risk of your finding fault again, I took *Nux vom.* 30th several successive evenings, with this result: that the stools were passed with more ease, the protruding hæmorrhoids became softer and smaller, and I was no longer annoyed with pain after stool. After ceasing the use of the Thuja for six days, I took it again, but the difficulties at stool returned again at once, so that I resolved to dispense with it for a longer time.

After having discontinued the *Natr. sulph.* for ten days, I took it again, three drops in water every hour. After taking it three weeks, my appetite diminished again, and, last evening also, I had a slight chill. I took this to be another indication that I was over-saturated with the *Natr. sulph.*, and will hence wait for further direction before I take any more medicine.

In other respects, I improve constantly. The pain in my right heel has disappeared entirely, and my legs are so strong again that, to-day for the first time, I could rise from my seat without the support of the hands. An enlarged gland in the left groin, which I have noticed for very many years, has already diminished very much and become softer, and the kernels on the thigh also appear to grow smaller. In the urethra, I can already pass a catheter of large size. The stream of urine is stronger, and not double any more. The eruption on the ears has healed. If I find that I continue to improve, can I take a short walk out of doors? For four months I have not been able to leave the room."

Answer. I have nothing to say against the use of intercurrent remedies, if they seem necessarily indicated, since you now seem to have lost the hasty anxiety, which sometimes leads to things superfluous.

I now commit to you the further treatment of the case, and know of no reason why you should not go out in mild weather, if you only guard against a too rapid change of temperature.

April 12. "My disease is so much improved already that I am able to visit patients even several hours distant, and can go up stairs, though with some effort. The tubercles are everywhere diminished, the bloody stools, as well as the condylomata about the anus, have disappeared.

I have not had any more occasion for intercurrent remedies. Thuja and *Natr. sulph.* I still use, according to your direction."

June 23. I received another letter from this colleague asking my

advice about one of his patients, with the remark that he was entirely well, and could take quite long walks without injury.

§. 340.

From these clinical cases, beginners, especially those who wish to instruct themselves regarding the nature of Homœopathy, can learn infinitely more than if I had merely given them rules, according to which they should form their conclusions and govern their practice. They contain a number of points of view which would not have become intelligible from the statements of the other paragraphs alone, and with this last case, the undeniable proof is offered at the same time, that, armed with the doctrines of Homœopathy, we can accomplish cures of diseases very severe in their nature, although we cannot submit the objects thereof to ocular inspection, an immensely great advantage over the physiological school, whose pedantry is simply and solely confined to its pitiable mechanical diagnosis, *i. e.*, to its five senses, and which, notwithstanding, does not attain to a categorical conclusion.

The physicians of the physiological school require, *pro primo*, the personal examination as the *sine qua non*, in order to be able to establish a diagnosis, prognosis, and indication, and to cure a patient.

Only when one has reason to place no confidence in his knowledge and conclusions, is there any necessity, in order to find out the right, to seek full satisfaction in things which are sensually known. Knowing is not mere seeing, but no proof interests the pedant; he has only antennæ.

From all these clinical cases detailed, the correctness of the conclusion is justified, that, in relation to the indication, we have to consider not only *separate* subjective and objective symptoms, which have occurred under Homœopathic provings, not that alone which has been gathered from these provings as the primary, secondary, alternate effects in a Homœopathic sense, but chiefly the general momenta, which, in all collections of Homœopathic provings, arranged according to the anatomical regions, precede the separate results, and have constitutional significance.

From these examples, it is furthermore clear that we must rightly interpret the symptoms which have been produced by provings with remedies, in their *pathological* significance also; our opponents would say, in their *physiological* significance, before we can establish a correct indication.

For the sake of illustrating this point, let us consider a few other cases.

I have repeatedly happened to see patients whose strength was reduced to the minimum, who, with a bluish countenance, stupor of the senses, with intercurrent attacks of fainting, were attacked now with chilliness, now with heat, combined with coldness externally perceptible, with sweating and hiccough, with such hoarseness as prevents speaking, for example, in consequence of pulmonary hæmorrhage, with the most distressing oppression of the chest and short breathing, with weak, irregular pulse and the greatest prostration.

Now we find, in our drug provings, all these symptoms again, as well under the head of Arsenic as under that of Digitalis.

But we should commit an unpardonable mistake in prescribing, without pathological knowledge, either Arsenic or Digitalis, upon the ground of this kind of similarity of symptoms; we should thereby only hasten the death of such incurable patients in the shortest time. For, whoever can look through our drug provings with pathological judgment will know that the Arsenic and Digitalis symptoms, similar to that stage of disease, are the indications of a fatal poisoning; that these substances, consequently, if they were given in such a pathological form, similar to these cases of poisoning, (which form suffers, thus, from so great a want in the *parts remaining healthy*), must be absolutely injurious, let the dose, in which they are given, be ever so small; for, without parts remaining healthy, every comparison according to the law of similarity and every cure has ceased. Then euthanasia, by means of palliative remedies, is fully justified.

We thus have, by the establishment of our indications according to the law of similarity, not only to compare the quantity, *i. e.*, the spheres of effect of the causes, and the quality of forms thereby produced, but we have also to estimate the conditions for the possibility of a remedial effect and its results, according to the category of modality. Hence, we have, in this respect, to look not only to the particulars, to the separate symptoms, but still more to the general, to the conditions upon which these symptoms depend.

Among the works which have endeavored to explain the symptoms of our *Materia Medica*, pathologically also, Dr. Espanet has thus far accomplished the most; the Allg. Hom. Zeitung has given translations of his rich experience at the bed-side; these contain an unusual amount of practical knowledge, hence should be recommended to the study of every beginner.

These writings also convince us that the condition of the special depends upon the quality of the general.

THE HIGH POTENCIES.

§. 341.

I now approach the subject most disputed still, not only by our adversaries, but also by very many of the adherents of Homœopathy.

It does, indeed, cost much time and earnest labor, observation and study, upon the healthy and sick; it requires a renunciation of all recommendations, as well as of all doubts relative to high potencies, in order to be able to separate, even here, *objectively*, the true from the false. With us, such labors are still committed to the self-sacrifice of each practical physician who seeks to penetrate deeper than the dogma of the universities teaches and recommends; a self-sacrifice incompatible, of course, with the indolence of any physician belonging to that craft created by the universities; a self-sacrifice, on the other hand, which, true to its calling, and in the desire of relieving suffering humanity at any price, without, at the same time, injuring it otherwise, knows no bounds and no fear of adversaries or other hindrances.

In a science and art which has to dispense, for the most part, with public teachers for young men, a text-book must follow the course of the intellectual development of its adherents, and should point out, as a warning, all those errors even, the avoiding of which will save the future student from stumbling.

I myself first learned the necessity of the high potencies, after many cases had compelled me to give higher and still higher potencies, and now I prescribe, much less frequently than before, anything lower than the 30th attenuation, while, at the same time, I have much better success at the sick-bed than previously.

Errors are thus the germs of truth, where the mind, without a teacher, is obliged to teach itself.

The Homœopathic centesimal attenuations, from the 30th upward, are called high potencies. Their efficacy, I regret to say, is still disputed, but only by skepticism, and such a strife always indicates a lack of power, or will, or sincerity necessary to settle it. Anything decisive *against* the efficacy of high potencies has, up to this hour, never been offered, and nothing either of the *rules* according to which their efficacy may find the needed explanation.

It hence devolves upon us, not only to establish the acquisition made hitherto empirically merely, but also to complete it according to natural laws; not, however, to quarrel about the one or the other.

As regards experience, every one can best instruct himself on this question, when he has had opportunity to change the circumstances,

for the operation of a remedy in the same case, *i. e.*, to study the operation of the law and the high attenuations in the same cases.

This subject requires at least one more practical example, and as such, I choose again the case which first irresistibly urged me to the use of the high potencies.

A girl of twenty-three, regularly menstruating, without any discoverable organic defect, had been treated a long time for hysterics, but without result, and she was finally committed to my care. Her complaints were confined to increasing loss of appetite, sleep and strength; and, indeed, for the last three months, without any known cause, only proceeding, as she thought, from pains in the back, which extended downwards and into the right thigh, so that sitting, and still more walking, was difficult for her. The examination of the patient brought out nothing more than that, about 3 P. M., in connection with a chill, the pains increased in severity, and this chill was followed by dry heat, and then by debilitating sweat.

I thought that I could easily dispose of this neuralgia, which was clearly intermittent, and gave, according to the schema of §. 259, Nux vom. 3rd, in hourly alternation with Ipec. 3rd.

It is true that all these pains, after a few days, were so much relieved that the patient could walk in her garden again, only there still appeared, from time to time, slight reminders of her previous ailments, till at length, after two weeks, they all seemed to disappear. Now, she had a violent mental emotion, and all her sufferings returned. She now took all her previous remedies again, and especially Nux vom. 3rd and Ipec. 3rd, during several weeks, but with so little success that she lost her confidence and consulted another physician.

For half a year I heard nothing more of her, when, one day her sister came to me in great haste, and in tears, with the request that I should renew my visits; the patient had been getting worse ever since I ceased seeing her, and now was so sick that they despaired of her recovery, for my first successor had declared that there was nothing more to do, and the second had ordered Iron, on account of anæmia, after which, she stated, uncommon debility and convulsions had followed.

The scene had now indeed become quite different.

The patient had not left her bed for months, by reason of the increase of all her sufferings; the liver and spleen were enlarged, and the pain in the back extended from the middle of the back, along the ribs on the right side to the front of the sternum, and three of the dorsal vertebræ were very painful for a long time, on being pressed upon. The whole right side of the body was as if paralyzed, *i. e.*, the right arm and

right leg could only be moved with effort. Every evening, at five o'clock, there was convulsive stretching of the limbs, vomiting and shaking chill, heat after half an hour, and, in still another hour, sweat, which continued all night. At the time of the remission the pulse was 60; the tongue was thickly coated yellow, bitter taste, loss of appetite, constipation, menses suspended for two months; the region of the liver and spleen very sensitive to pressure; the urine was alkaline, with a copious sediment of soda salts—in brief, all the symptoms pointed clearly, according to the law of similarity, to the alternation of *Nux vom.* with *Ipec.*, for the disease had remained the same, only it had gained in extent.

The result with the previous attenuation, however, could not be called satisfactory at all, and this made me all the more determined to give the same remedies in the 30th in alternation, every two hours, as they are no nutrition remedies. The next day, the tears of the friends were already dried up, and it suffices to say, that the patient was cured in a short time.

Such facts may be read by the hundred in Homœopathic literature; but what help are they to science? In accumulating facts, science does not find entire satisfaction; it must have the law, for without it, as regards the question of high potencies, we are still upon the empiric stand-point of physiological medicine.

I deem it necessary to present a very instructive case, which may the most easily convince the unbelieving, because it occurs very frequently, and must challenge imitation. Homœopathic physicians surely will often have to treat cases of intermittent prosopalgia, which originate from marsh miasm, and will find that *Ars.* 3rd given alternately with *Nux* 3rd, is crowned with the best results, when given every half hour; but, unhappily under this proceeding, the drug-symptoms do not fail to appear. This fearful pain will, however, often in a very short time, and without drug-aggravation, disappear entirely in two and three days, if these two remedies are given in the 30th attenuation, and in hourly alternation.

The beginner, who wishes to instruct himself touching the effects of the high potencies, had best prove such medicines as operate more surely in the 30th attenuation, than in the 2nd or 3rd, *Ars.* 30th, for example, or *Thuja* 30th. He must previously have read the provings of such remedies, in order to know what may occur, and he will be surprised at the appearance of many of those symptoms. Thus, for example, in the proving with *Ars.* 30th, the specific thirst will appear in almost all bodily constitutions, and in proving *Thuja* 30th the softening of the finger nails; hence he will observe both upon himself.

As regards logic, the following: Many Homœopathists contend that the divisibility of matter is *infinite*, otherwise the high potencies could not have any effect; the French Academy, on the contrary, calculated that the quantity of Alcohol necessary for the preparation of the 30th attenuation, is more than 925 octillion times the size of our earth, and, on this account, maintains that, consequently, in this volume every healing power of a drug must long ago have reached its *end*. §. 226.

But these, as already said, are only *quantitative* conclusions, and, as is well known, matter does not exist according to the law of quantity alone.

In contrast with the view of those Homœopathists, the limit of a substance, even in a mathematical sense, is its outline, and this is a property of all bodies. Hence an infinite magnitude is no magnitude, because limit excludes the infinite.

But the 30th attenuation, many experienced Homœopathists say, on the other hand, does notwithstanding produce effect upon the human organism, and even the 2000th according to experience, and this great divisibility of matter reminds one truly enough of the constancy and infinite divisibility of space and time, the first conditions of all matter.

Here are proposition and counter-proposition, which are by no means arbitrarily conceived, but, on both sides, there stand strong arguments and counter-arguments.

Now, one would suppose that, of two contradictory assertions, one must necessarily be true, and the other false.

If, however, a contradiction can be maintained regarding any particular thing, then that is always a sign, that, in the idea of this very something a *contradiction lies concealed*, and that this idea itself is incorrect.

Just herein consists the logical sign of the impossibility of an idea, if, under its application, two contradictory assertions can be at the same time both true and false; that, consequently, because no third can be thought of as existing between them, nothing at all can be conceived of by that idea.

This something which is hidden can hence clearly not lie in the material world, for this is *open to us by observation and experience*; hence this contradiction can lie concealed only in our conception, which we form there of ourselves.

The whole strife, hence, rests in fact upon the contradiction between sensual perception and our idea of it; it is thus a secondary phenomenon.

If one, for instance, upsets the supposition that the material world, aside from our knowledge thereof, has still another abstract existence in our idea, then he finds that the whole strife rests merely upon a phantom, which arises from this, that one applies an idea to the phenomenon itself, which, however, forms only one of the conditions under which a phenomenon is capable of being known.

This capability of a substance being known lies now, in fact, not *always in its quantity*, which unhappily so often lies concealed from our senses, but most certainly in its relation, in its bearing upon others. §. 221.

The whole strife about finite and infinite divisibility of matter may thus be settled to the satisfaction of both parties, since both must become convinced that they are disputing about *nothing*; for each of the two parties says more than he knows, because he transcends the limits of his own experience. He, upon the side of the French Academy of Sciences, speaks in the interest of the progress of knowledge, but to the injury of practice; the other party has the practical necessity in view, and presumes to know what he has yet to seek for. Thus the assertion of one is *too great* and that of the other *too small*.

Hence, both affirmations are *objectionable*; on the other hand, our aim should be, to discover the laws or rules which govern here, and these inhere in every substance, in its relations to others.

§. 343.

If the reader of this Text Book, however, will well consider the various facts which are herein presented, he will find that the rules for the use of the high potencies, and of the dose in general, simply lead him to the following:

1. We must, according to the experience obtained with the law of similarity, operate with low attenuations, if we would pursue, according to qualitative causality, one single object, or operate upon separate parts; for example, in hæmorrhages during or after birth, if we would promote the agglutination of the injured parts with Arnica, or prevent suppuratation. If one proceeds upon such indications, then the effect stands in direct relation to the quantity of the dose, which can be as low as the Homœopathic mother tinctures, though these are useful only in extremely rare cases. Here we shall attain our end more promptly with the first, second and third decimal attenuations, than with a high potency.

2. Under the use of these low attenuations, we see very clearly how one symptom after another disappears, more or less rapidly. If we give *Phosph.*, for example, in pneumonia, where it is indicated in from the 1st to the 3rd attenuation, four or five drops every fifteen minutes, then the stitching pain disappears wholly and forever, and seldom later than after two hours, and a marked apyrexia has clearly set in, but the dyspnœa still continues, and one may think himself lucky if he has not produced, in their place, other effects of *Phosph.*, colic, diarrhœa, etc. The chief fatality, however, consists in this also, that the absorption of the exudations takes place either not at all, or very slowly. But if we give *Phosph.* in the 30th attenuation, or still higher, every hour, or even not so often, then the stitching pain remains longer, the apyrexia follows later, but the absorption of the exudation goes on *pari passu* therewith, as well as the decrease of the difficulty of breathing, while the unpleasant secondary symptoms of *Phosph.*, colic, diarrhœa, etc., do not make their appearance at all. Hence, by the use of the high potencies, the morbid symptoms disappear quietly and without disturbance, as the mists are first scattered by the beams of the sun, and then disappear without any further phenomena obvious to the senses, leaving behind no trace of their existence. Hence, after the use of the high potencies, we have no longer to struggle with any residuum of the disease, *e. g.*, we have not to complete the absorption of the exudation by means of still other remedies.

3. When the question is to change reduction processes into oxidation processes, and *vice versa*, then we cannot dispense with the lower attenuations, as we learn from most of the clinical cases which have been contributed.

4. But if we have to effect changes in processes of retention, then we do best with the high potencies, and it seems here as if the effect of the indicated remedy was in an inverse ratio to the quantity of the dose; for here we must, as a rule, employ high potencies, if we wish to have any results.

5. But what must we do if, for instance, after the third attenuation of a remedy which is really indicated, no evident effect appears? When shall we lower the dose, and when shall we raise it? This question is answered as follows:

6. If we have to do with predominantly *functional* disease-forms, then we must resort to the higher potencies; but if we have to cure predominantly nutritive changes, then we must go to the lower attenuations. Hence, the nutrition-remedies answer the least in the high attenuations the function remedies the best. §. 230.

Thus we see that we must consider this subject even, not only according to quantity and quality, but chiefly according to the category of relation.

7. A chronic disease, especially when it depends upon retentions in carbo-nitrogenous bodily constitution, can be cured in general *only* by the high potencies, in the most rapid, most sure, and, to the patient, the most pleasant manner; and, indeed, it may become incurable under the use of the low attenuations. This is an experience which has been made many thousands of times, and which yields neither to skepticism nor dogmatism. Skeptics and dogmatists should at least instruct themselves with the 30th decimal attenuation, as regards these relations; then surely they would be less horrified at the use of this attenuation.

8. The repetition of the high potencies can occur only when the process of the cure, introduced in the first dose, comes to a stand-still. A more frequent repetition of high potencies is indicated only in acute diseases; in the so-called chronic diseases, an immunity against the remedy will occur quite too soon, and one must then proceed according to §. 243, but in such cases this should be avoided.

9. If the use of high potencies is to be associated with such glorious results as so many Homœopaths can show, these rules, according to my experience, must be observed, or one will be miserably disappointed. But it is also necessary for one to prepare these high attenuations *himself*, if no Homœopathic Pharmaceutist, entirely trustworthy, is to be had; this is the first condition for certain success, for what avails the most faultless indication, if the manner in which the remedy is prepared mocks every result?

Finally, as regards the idea which our opponents frame, touching the impossibility of the effect of high potencies, we may add to what has been already said in §§. 220 and 221, that the uncertainty of the conception of *ideas* may be two-fold. In one case the conception may transcend the subject which may be presented to our view; in another, we conceive of the idea of an object different from what it is, since we *deny* its quality. Hence the Allopathic negation of the Homœopathic dose possesses the same value as the negation of the high potencies by many Homœopathists. Both these opponents, therefore, could extend to each other the hand of reconciliation without hesitation, for the ideas of both opponents transgress the limits of perception. The Homœopathic negation of high potencies, however, deprives itself of immediate perception, *i. e.*, of observing the actual efficacy of high potencies at the sick-bed, just as the French Academy of Sciences does with the negative results of its calculations, for even this

latter appears to have no desire to contemplate an object which exceeds 925 octillion times the volume of our globe.

This scope of possibilities, to conceive differently of any given subject, and to change it at will, makes room for the most extravagant *ideas*. However, seeing alone gives us the immediate perception of an object. Seeing is a matter of experience, ideas are *dreams*, which lack *reality*, and this, hence, is the degraded intellectual platform of all those who, to this very day, continue to *deny* the effects of high potencies.

§. 344.

The doctrine of high potencies is the most glorious acquisition of Homœopathy. It developed its greatness and might in an intellect which has lit up the path of natural science for more than half a century ahead, without having been comprehended, however. And what are the discoveries of the spectrum analysis to the discovery of Hahnemann's high potencies? The spectrum analysis is as yet very far from giving so deep an insight into the laws of the organism as the high potencies. Beyond the reach of Chemistry, the experiments of physics first led to the foot-steps in the work-shop of Nature, where *the greatest is brought forth from the least*. If Chemistry itself confesses "only that which chemically has developed into existence, which has become completed, can be the object of our observation; the How of a thing's coming into existence is entirely concealed from our view" (Dr. Wagner, *die Chemie*, 1864), on what ground does it presume, and so far forget itself as to maintain that what, by virtue of high potencies, daily happens and is accomplished at the sick-bed, and which is not the object of their, but of our, observation, can be nothing, because the How of its appearing is partly concealed from its view?

But let us hear Schopenhauer once more.

"What is commonly called *public opinion* is, plainly speaking, the opinion of two or three persons, and we should convince ourselves of the truth of this, could we but see into the mode in which this public opinion originated. We should then find that there are two or three people who first assumed or declared or affirmed such a thing, and, in whom others are so kind as to trust that they had very thoroughly examined it. Taking for granted that these had sufficient capacity of judgment, a few others also accepted their opinion; these again are believed by many others, whose indolence rather inclines them to believe it at once than to take the trouble to test it. Thus grows, from day to day, the number of such indolent, easily believing

adherents; for, if the opinion had only gained a goodly number of advocates, those who adopted it afterwards attributed its popularity to the quasi-fact that those already accepting it could have done so only on account of weighty reasons. Others were now constrained to accept what everybody else accepted, lest they might pass for restless souls who were setting themselves up against generally received opinions, and, for malapert hinds, who would be wiser than the rest of the world. Assent now becomes a duty. Now the few who are capable of judging must be silent; and those who are permitted to speak are those who, perfectly incapable of forming their own opinion, or judgment, are the mere echo of the opinions of others; nevertheless, they are all the more zealous and intolerant advocates thereof. For they hate, in those thinking otherwise, not so much the diverse opinion they hold, as the arrogance of daring to judge for themselves; something, by the way, which they never venture themselves, of which they are at heart conscious. In short, very few can think, but all claim the right of having opinions; what else then remains for these latter since they cannot make opinions for themselves, but to adopt the ready made opinions of *others*? As this is the case, of what avail now are the voices of a hundred millions of men? “Dico ego, tu dicis, sed denique dixit et ille; dictaque post toties nil nisi dicta vides!”

In these words, the opinion of the opponents of Homœopathy in general is beautifully set forth.

§. 345.

Thus Homœopathy is still a science bitterly hated by the professors of the universities, and hence by their pupils, consequently by the majority of physicians, upon *subjective* reasons; but what reasons are they?

1. Because Homœopathy presumes to assert, and to maintain, every day, by deeds, that it understands far more of Therapeutics than these professors.

2. Because these professors and their pupils, lacking in independent thought (who, naturally enough, according to the laws of the human mind, and by virtue of their education, are found in the largest majority), have labored hitherto *in vain* to oppose this science, though they have labored with all their powers and even in the most discreditable manner.

3. Because they must go to their daily work with the oppressive consciousness that they never have succeeded and never will succeed

in their opposition to Homœopathy, for it ever grows in the esteem of the public, even under the scornful eyes of its adversaries.

It is, hence, a duty of this text-book to set forth one of the latest efforts in this direction.

The generalizations in vogue in Homœopathy, and only intelligible to it, yet superfluous, as, for example, that minimal doses have a contrary effect to large doses, or, the quantity of the dose stands in inverse ratio to the effect, are, taken unconditionally, falsely and nonsensically, and have furnished our foolish adversaries, weapons for the strife.

There has just appeared a manual of general pathology and therapeutics, by Dr. Lebert (Breslau, 1865), and the author thought himself obliged to attack Homœopathy, for the honor of his guild, with the repetition of the old and stupid phraseology of his predecessors.

On page 785 he declares, "In fact there is nothing more hostile to the fundamental maxims of chemistry than the proposition that the effects and reactions of a body increase, qualitatively, in inverse ratio to its quantity, that hence, quantity and quality must be properties mutually opposite."

By means of this proposition, which, as regards the category of quantity, is presented in so sweeping terms, the Professor —, whose work, by the way, exhibits an astonishing ignorance of the origin of many pathological processes, *e. g.*, of ileo- and petechial-typhus (not to say a word of his ignorance—natural enough, in therapeutics)—might possibly have advanced an opinion, somewhat embarrassing to the capacities of students.

But one sees, at once, from this opinion, that he lacks experience regarding the subject of which he judged; it rests solely upon the misuse, just reproved, of general relative ideas and categories; it anticipates observation, and may deceive just so far as the authority of the professor has weight in the eyes of his pupils; no further.

Quantity indeed determines only relations of magnitude, as *subjects* of unities or pluralities; the quality determines properties, thus, *predicated* realities; consequently the quantity is nothing, but its existence, which can find its quality only in connection with other realities. Hence, according to natural laws, the quality of the reaction of the organism must change with the increase, or decrease, of the quantity of a substance which has been brought into reciprocal action with the organism. This is shown, for instance, by the full allopathic dose of Ipecac, in contrast to its so-called *refracta dosis*; the former excites vomiting, the latter not, but promotes, even without producing vomiting, expectoration. And can we not thus say that that quality

of a substance, which excites vomiting, possesses in another quantity, opposite or different qualities?

Hence, let the professor, in whose work the "*Nescimus*," so characteristic of the physiological school, is capitally illustrated, beware of carelessly handling the categories of quantity and quality, and, neglecting the category of relation, of seeking to make opposition to Homœopathy. Homœopathy uses the expression "opposite" ["*entgegengesetzt*"] not even in the sense which the professor, in his ignorance, ascribes to it, but in a mathematical sense. In all branches of mathematics, *magnitudes* appear, which, notwithstanding their similarity, yet, as regards some property independent of the magnitude itself, and *hence external thereto are essentially different*. This property is in mathematics, and in Homœopathy, the state of being opposite [*Entgegengesetztsein*], but no contrarium [*Gegensatz*].

§. 346.

Moreover, regarding any decision concerning any quantity, the measure, *i. e.*, the unit, must first of all be established as a starting point, as well as the divisive rule which lies at the bottom thereof.

In the physiological school, the apothecaries' weight is the measure, and the unit from which it sets out; and it prescribes its drugs in grains, scruples, drachms, ounces, or pounds.

This unit of weight does not exist, however, in the organism; this is composed of cells, of their molecular substances and atoms. Hence, the apothecaries' weight cannot be that unit with which the organism is to be treated. Hence we have to consider the dose, not as regards the magnitudes of weight, but as regards the magnitudes of measure, and if one would measure a body, then the measure thereof must be of the same nature with the body to be measured. Lengths must be measured by lengths, planes by planes, bodies by bodies.

We have already seen, in §. 221, that the measure of the molecules and their atoms is identical with their power of contraction; hence we can reasonably order nothing but molecular substances and atoms, having first examined the reactions of the organism against these very substances in the healthy body, in order to obtain the right measure for the patient. It is, thereby, most precisely demonstrated that the dose cannot be determined by weight, which indeed one would think could never have been disputed. The end of the plant and of the animal is determined by its beginning; they are at the end, just what they were in the beginning—atoms. This our attenuations also

prove, with which we are able to perform cures unattainable by the physiological school.

With this example it is sufficiently demonstrated, that the contradictions, which the adherents of the physiological school pretend to find in Homœopathy, disappear in those very terms of subdivision, which they, from their standpoint, are wont to overlook; for they believe that everything is only so constituted as they have been taught to perceive it.

§. 347.

If we wish to measure the *degree of the effect* of any substance, we must by no means confine ourselves to the relation of quantity and quality alone, but we must here set out from the *divisive term of the indication*, which does not appear at all in the ideas of quantity and quality; for where there are two contradictory propositions, in no case can they both be true. But it frequently happens, as in the present case, that the disjunction is not two-fold, but three-fold, and the third term of division lies concealed from the observation of the physiological school. This is the case indeed with the denial, by the professor, of the maxim of Homœopathy, that the effects and reactions of a body increase qualitatively in an inverse ratio to its quantity. If, for example this very same professor would produce diarrhœa, according to his method, this can be done with a few drachms of Rhubarb; but if he will check a diarrhœa, this he can accomplish with $\frac{1}{4}$ grain doses of the *same* Rhubarb. Here clearly, in the first case, the effect stands in direct ratio to its allopathic dose; in the latter, in an inverse ratio to the *same*.

Just herein lies the curse of relative ideas, that they make one blind! Thus, in such a question, the dividing term is the *indication*, and neither the quality nor the quantity. Thus the dividing term gives, to the otherwise paradoxical idea of potency, its full significance.

Lebert, however, attempts to escape from this strait, by the assertion: "In my youth (alas! the good man is even now a long ways from being old in years, or mature in logic. Author,) I experimented on myself, with many of the pellets, prepared by Hahnemann himself, and never could I find any of the symptoms announced by Hahnemann in the *Materia Medica Pura*. And as it happened to me, so has it certainly happened to many other candid inquirers."

That this might often happen, no Homœopath will deny, because every one who has proved the attenuations of various substances upon himself, has had the same, as well as the very opposite, experience,

for, in order to become sick, two things are necessary—an outer disease-producing cause, and an inner susceptibility to its effects. Or does the Professor think that the organism reacts against remedies otherwise than against morbid and nutritious matters, thus according to various natural laws, and not according to various conditions?

Of course, for he continues: “If, moreover, there were but the least trace of truth in Homœopathy, then every disease must be influenced by the substances which are contained in various articles of diet and drink, and which are used by Homœopaths as drugs.

“Truly it is *difficult to determine whether these substances cure diseases, which, however, would have to be the case with those diseases which present morbid conditions similar to those of the remedies*, while all other of these ingredients must produce those diseases which these substances, according to the *Materia Medica Pura*, are said to call forth.”

His first proposition, the Professor thus is good enough to controvert, by the following, which is printed with displayed type. The continuance of the sentence is again an empty stratagem; for Homœopathy does not say that substances of the external world produce *those* diseases which they are said to call forth; but that the substances of the outer world cure such diseases as are similar to those diseases which these substances can produce. (The words “call forth” must, indeed, have slipped in inadvertently, else our opponent would have expressed himself quite unintelligibly.) Practical examples, as well as theoretical proofs, for the truth of this maxim of Homœopathy, properly expressed, are abundantly presented in the foregoing pages, and no fewer are the examples and proofs which show incontestably that even the various substances which appear in our food and drink are to be enumerated here, §. 257, etc.

Aside from this, the difference between the substances which are given *isolatedly* as remedies, and the same substances which are found in food, consists in this, that, in Homœopathy, the remedies are not brought into the organism in their organic combinations, but pass directly from the cavity of the mouth even, into the blood, so that whatever of the remedy finds its way to the stomach is mostly lost; that the substances in the food leave their *organic combinations* only when, in common with these combinations, they have suffered other chemical combinations and changes, according to the laws of digestion, hence when they can be further used only according to the laws of nutrition in the organism, and consequently can exercise no curative influence upon diseased organs, tissues, etc.

That physiological medicine has not progressed so far yet as to give its remedies in such a manner that their undisturbed action may be observed, but rather pours them into the stomach without ceremony, where they undergo the most various changes, which makes their effect absolutely injurious or uncertain, this does not at all prevent this school from adhering to the weight in its dose, for less quantities would always, as it thinks, be still more uncertain, if not entirely inefficacious—views which one should not be called upon to controvert, considering the present position of all the natural sciences.

He then inquires in his simplicity, or rather in his ignorance, “Whether Quinine in *therapeutic* (?) doses has ever produced a condition similar to fever and ague”—a question which, as is well known, has been answered in the affirmative, even in Allopathic journals, and “whether Iron ever produced chlorosis;” a question which he may find answered in the affirmative, every day in his practice, or that of his friends. And a teacher of the young cherishes such doubts! If, however, doubts come over him on any subject, why does he not rather solve them manfully, as becomes a scholar, by exact experiments, in order somewhat to increase his scanty knowledge, instead of deceiving himself and others with arbitrary opinions?

But he fears the one source of all human perceptions; he fears the *demonstratio ad oculos* which the truth of Homœopathy would present him with reproachful features, since it has been often experienced that who ever gave themselves, free from prejudice, and thoroughly to the study of Hahnemann’s discoveries, have left the physiological school and gone over to Hahnemann.

§. 348.

Another stratagem of this Professor, employed against Homœopathy, is worthy of mention, viz.: “We finally add, that, while Homœopathy, for nearly half a century, in all countries of Europe (pardon me, Professor; in all parts of the world would be more proper. G.), has met with an undeserved toleration (because all people do not live in the slavery of a trade’s union. G.); while Homœopathists in many places have obtained the permission to dispense their own remedies, a favor forbidden to other physicians (though in many countries it is granted to allopathists and not to Homœopathists. G.); while, in the higher and very highest circles of society, Homœopathy has always found many a Macænas, ‘Science,’ in this half century, has, nevertheless, not ratified a single one of the principles of Homœopathy.”

Surely enough, here the shoe pinches! Thus, because "Science" has ratified no maxim of Homœopathy, for what interest could physicists and chemists have to declare that Homœopathy possessed a scientific basis, therefore Homœopathy lacks scientific confirmation.

To this we may answer that physics, the doctrine of the qualities of bodies, has among its adherents several prominent men who have given *de facto* explanations of the effects of Homœopathic attenuations, for example, Profs. Doppler, Ozanam, etc.; and that to chemistry this is impossible, because it concerns itself only with the ponderable quantities of bodies.

Moreover, neither physics nor chemistry, neither pathology nor physiological medicine without Therapeutics is the sum total of "science," and that Homœopathy is one of the branches of natural science, has been sufficiently demonstrated, I hope, in the foregoing pages. With the equanimity of every impregnable truth, Homœopathy still waits in vain for a scientific refutation of its experiences and principles.

But, because some have subjective grounds to hate and persecute this truth, they find it all the more easy so to do, the more they feel their egoism in danger. §. 2. A doctrine which, as is the case with physiological medicine, has to fear toleration and needs the protection of the government, is worth nothing! Or is not the fact that Homœopathy has its patrons in the higher and highest circles of society proof that the intelligence of society favors Homœopathy? Could it be possible for this fact to be used as a reproach to Homœopathy rather than to the physiological school by men who wish themselves to belong to the *intelligence* without fearing that they thus flatter nobody less than themselves?!

§. 349.

In Homœopathy everything develops itself according to natural laws, hence, in a natural manner; nothing happens which is simply inexplicable, wonderful or mysterious; its every problem is an object of science and art, and the explicability of its practice rests upon this, that the course of all homœopathic cures and the connection of their diagnosis and indication is controlled by necessary laws. All homœopathic theories and practices I have arranged in the sections of this work under *Natural laws* and natural designations. It would not be worthy of the high stand point which has been demonstrated in this work as belonging to Homœopathy, if it should delay any longer to change the party inscription into a scientific one, as is becoming the subject. I know right well that orthodox Homœopathy not infrequently declares

that it is no system, no theory, and only a method, a mode of treatment, by which it seeks to indicate its *modus inveniendi*, while, at the same time, it wishes to intimate its disinclination to establish its practice theoretically. This is evident also from its one-sided appeal to its practical results, to its experience.

But, according to my representation, laid down in this work, it is a *science*, because it possesses a complete subordination of its specialities under the generality of natural laws, and because this subordination can only take place *systematically*. It is not only this systematic order which belongs to its possession, but also the established explanation of the connection of its practical experiences by virtue of natural laws. Science calls such a possession *Theory*. This deduces its progressive principles from its essential reasons [*rationes essendi*] under a hypothetical form, from the general, and its retrogressive principles, from perceptive reasons [*rationes cognoscendi*] by rational induction; and again, because it can always demonstrate, *ad oculos*, what it has expressed by judgment; because it is, hence, a demonstrative science also, therefore Homœopathy may be most appropriately designated in relation to Therapeutics as the medicine, or *Therapeutics, according to natural laws*.

CONCLUSION.

§. 35^o.

Finally, it is clear that we live in a transition period. The literature of the physiological school becomes every year more unfruitful for practice, and not a few opponents stand tottering before us; among practicing physicians, at least, this is an indisputable fact. There is no *juste milieu*; it would be very acceptable to some, as tending towards reconciliation; yet, "the efforts towards unity" of one of the greatest physiologists, of a Virchow, have failed; by others, it would be hated and despised as a sign of weakness, and no party stands more watchful on the look-out than the Homœopathic and yet the watch-word on all sides is "Progress."

The hollowness of the physiological school manifests itself as soon as its doctrines are *analyzed*, as has been done in this work, and if progress were earnestly desired in that school, the question should first have been answered, without prejudice, what is the old and what the new. It is impossible for the physiological school to answer this question under the present separation of party literature. Where should this end?

Let us hence stand firmly by the positive doctrines of Homœopathy! For all the power which the mind exercises over nature rests upon a thought, *a priori*, which controls nature by nature, as happens in Homœopathy.

The greatest creation of the human intellect, astronomy, found its origin and development not by doubt, not by empiricism, not by accident, not by rationalism, but it has become great, simply and solely, by induction and abstraction, and has, in this way alone, made for itself indisputable laws, principles, and practical methods. It must hence stand before us as a model, but by no means must we accept, as such, any schematism of the physiological school, which found its ruin in its empiricism, its dogmatism, and its skepticism.

Every physician who indulges himself at the bed-side, in any conclusion, must be conscious of all this, in order to enable him to determine at once, regarding the value of any of his conclusions, whether it is a mere rational, or an incomplete inductive, a mere empirical, or a rational inductive, or whether finally an abstracted conclusion, and especially whether it will abide the test of a naturo-philosophical critique.

He then knows, in a moment, how much value attaches to his undertakings based thereupon, and what results he can promise himself from them.

These deductive forms present, therefore, the infallible tests of the greater or less worth of our conclusions and assertions; they are the sharpest instruments of our intellectual operations, in absence of which no one would know, with *certainty*, where he stands with any dictum or decision.

Thus it is to be hoped that now it has become clear and manifest, that the Homœopathic treatment of *any disease* is by no means a mere child's play, and presupposes an incomparably greater amount of theoretical and practical knowledge than is possible for the curative mode of the physiological school in its lack of such acquirements. Many cases are given up by it as incurable, which, with that degree of skill which I require of the physician in this work, are quite accessible, and can be perfectly cured.

§. 351.

To him who has as yet no idea of a naturo-philosophical critique, it must surely happen, moreover, that he can consider but the fewest of the cures occurring under his care as having been brought about by his efforts; for, in the first place, such physicians consider the end

of *their line of vision* to be the end of the world, and finally, to speak with Schopenhauer, it is "natural that, as the sun needs an eye to receive its light, and music an ear to catch its sounds, so the *worth* of all masterpieces of art and science even, is *determined* by congenial and appreciating minds, to which those works address themselves. These only possess the magic words upon which the spirits, conjured up in such works, present themselves, and become manifest. Hence the various impressions of these same masterpieces, according to the capacity of the mind which receives them!"

Just as light dawned upon astronomy when the geocentric system, which was most obvious to the common mind, gave way to the heliocentric, so must we also, in our mode of treatment, at the sick-bed, turn away our thoughts, first of all from the seats and forms of disease, and fix them upon their *material* causes and conditions.

§. 352.

There can be furnished no greater proof, on this earth, of the truth of any conclusion, than by the spontaneous appearance of this truth over and over again from nature, from many quite different leading principles of different sciences, *and this without being sought*; this is the case with the truth of Homœopathy.

It is true that chemistry was discovered in the search for the Philosopher's stone; physics and astronomy in the search after astrological predictions, but chemistry and physics were *not* existing *at the same time* with, and much less *before*, these leading principles, but were only gradually developed from them.

But while Homœopathy owes its origin and development to no foreign, but to its own leading principles, the adherents of Rade-macher, on the contrary, sought after specific epidemics, in order to abstract from them indications for their Therapeutics; *involuntarily*, however, they came by their maxims, upon the results of Homœopathy, as has been shown in the foregoing paragraphs devoted to this subject; physics, sought after the law of the decrease of molecular attraction, but *involuntarily* presented a firm foundation for the Homœopathic dose; agriculture sought for manures, yet without the slightest thought of it — *involuntarily* — found nothing but the necessity of guiding itself by long-known Homœopathic laws; chemistry sought, without any leading principle, merely from curiosity, after the constituents of human organism, but presented us, *involuntarily*, with important elucidations of Homœopathy.

Thus, although all these various doctrines oppose Homœopathy, simply and solely by reason of the insufficient faculty of perception, which their representatives possess, yet still they offer, as do also physiology and pathology, with their own *investigations*, in their own domains, always in reality, the most striking proofs *in favor* of Homœopathy. How can that be explained?

Developing its greatest strength in *skepticism*, physiological medicine neglects to remind itself of the delivering act of the physician and still more of the "hic Rhodus." Whoever desires more complete knowledge on this point, let him take up Prof. Wunderlich's work, entitled "*Geschichte der Medicin*," 1858. One cannot call the contents of this work a history of medicine; it is rather a skeptical fault-finding with all the theories which have appeared since antiquity, according to *subjective views*; a regurgitation of all the nonsense which has been known since the remotest times. The practical gain, however, is lost sight of entirely, so that it assumes the appearance as if the author had merely sought opportunity, less to show his acuteness, than to let loose his *anger upon everything not according with his ways of thinking and doing*.

Occupying himself only with the respective perceptive reasons (*rationes cognoscendi*), he never undertook the task of the historian to find out what motives had produced them, what facts became the burdensome source of fallacies, and why it was attempted *to explain* these facts by fallacies of all kinds. If, for example, he read in the ancients that they took the chill to be the cause of the fever, because it usually preceded the heat, it was his duty to explain to us, at least, upon the ground of the laws of nature known to us, what was false in this idea, and why it must so happen, and how the process of fever, from the present standpoint of general science, finds its explanation, *an explanation* which then could not again be overthrown by the next best speculator. This I should have called writing history of medicine. An excerpt is not history at all, and skeptical remarks superadded do not extend our perceptions. He might have made himself very useful had he undertaken to direct a science, which, for thousands of years, has been accustomed to occupy itself with speculative ideas, to the eternal laws of nature, and one would hardly deem it possible that a regularly appointed teacher of medical art and science were really quite unequal to such a task. Thus we have learned nothing new by this history, though we have seen that the old manœuvre of persistently pouring out, with little trouble, a flood of abuse upon the loose literary productions of those given thereto, has as yet not ceased hoping for laurels.

The question of the historian is not whether the various theories were inappropriate or whether they still are or are not inappropriate, but whether, now even, we do not know any laws of nature, the place of which these theories formerly occupied. *That would have been the critique of history.*

However, in absence of a *natural-philosophical critique*, nothing else is to be expected but that one extreme should always call forth another. While skepticism exhausts itself in questions, from which it finds no exit, dogmatism makes *tabula rasa* and commands. Neither is becoming to science; both destroy the hope of ever reaching the truth.

The best thing in this history of medicine, beautifully setting forth, as it does, the present tendency, barrenness and prospect of physiological medicine, is the concluding passage, it having been previously assumed, as a well established fact, that all the past is of no value to us whatever. It reads:

“But what is the future and the further task of our science? Its foundations, so far as they are worthy (“true,” no doubt, was the word he meant. G.), remain imperishable. But it is the character of all perception occupying itself with nature, that it never reaches the terminus, and that, with *every acquisition the circle of problems enlarges*. In what the future problems consist, no one can foretell. But this much is sure, that the future problems lie neither merely in *physical* nor in *chemical inquiries*, neither in the elaboration of a neuro-pathology, nor in the inquiries regarding the blood and the cell, nor in a *more subtle and acute diagnosis*, nor in the rehabilitation or *creating anew of therapeutic maxims*; the task of the future is no other than that which medicine has always had; it is the task to seek and find the truth, wherever and whatever it is, and in whatever way it can be found.”

This is a sound quite different from that which came from the same quarter in 1842, but, nevertheless a sound which lacks others to form an accord; yet, it seems so perfectly harmonious with what I had to demonstrate in this work with regard to the pathology and therapeutics of physiological medicine, *that it afforded me the most satisfactory confirmation thereof, as well as no slight pleasure.*

Have I not demonstrated, not only that the circle of *problems* in this school must *necessarily* enlarge with every addition of the unknown, but also why this is the case? But in this there would be no merit even. The main thing is the proof which I have, at the same time, adduced, that these acquisitions were never made according to a philosophical programme, but out of curiosity, according to the whim

of this or that experimenter, who just then wished to try his powers; that further, the new acquisition of therapeutic maxims, absolutely necessary as it is, must be secured from the eternal immovable laws of nature; that this, finally, is the only possible way to seek and to find the truth.

To this, then, the great programme of the year 1842 had led, to which the majority of the medical world deems itself unconditionally pledged to pay allegiance, that it has gained, as yet, not even an idea in *what direction and way it ought to seek for and find the truth*. Can any one make a more complete *confession of intellectual or mental poverty*?

But this must needs happen on account of the mysterious neglect of the laws of nature, by reason of the inconsiderate leap over the law of causality and inertia into the misty regions of fancy. The unpracticed judgment has sought, since that time, the conditions of disease and of cure in the physiology of life alone, *i. e.*, in *one* of the conditions thereto, and lost the faculty of remembering the *other* of these conditions, the outer world. Hence, the whole of medicine has been taken possession of by its help-mate, by physiology. The stone sinks in the water; what is the cause if it reaches the bottom? Not the stone and not the water, but he who threw it into the water. Its greater specific weight and the inferior density of the water, of course, form part of this reason, since the stone without them would not reach the bottom; weight and density, however, will never tell us, to the end of time, who threw the stone into the water, or who again could take it out. Yet, physiological medicine maintains that this may be learned after having explored more precisely the properties of the stone and the water; at some future day, and that—although in times inconceivably distant—this may be learned after all.

§. 353.

Thus the *truth*, which, from such a stand-point, evidently is yet sought in physiological medicine, in which, hence, quite as evidently no inkling ever existed of where it is to be found, is not only found, as regards the maxim, but contained, *de facto*, in the laws of nature, for the practice of Therapeutics as well as for the establishment of infallible diagnosis, indications and prognoses.

I am quite conscious of the fact that many who may read this work do not wish to be instructed; for, at the present day, there are no buds in which the blossom lies imbedded; now-a-days men pretend to a knowledge of all things, no matter how distant they may be therefrom; scarcely have they sown when they desire to reap; scarcely

have they laid the foundation when the roof is put on as the last finish; hardly have they begun when they think that they have reached the end. Even good advice is no more desired. Small and narrow as is the range of vision of the majority even, everything is excluded and rudely rejected which approaches too near from another range of vision. But, *experience* cannot be *taught* and *furnished by education*, it must be *acquired itself*, and it matters not how short the measure is with which the experience of others can be measured, yet each one measures everything by himself. Of these evils, that segment of history, in which we ourselves now live, is so full, that I have preferred, instead of teaching, to allow facts to speak for themselves. Still less have I strayed into the region of reconciliation; for each one, after all, does what best pleases him and his surroundings. *On the other hand, the practicing physician can take the laws of nature, as laid down, and the facts thereby established, just as they are, without delay, and apply them at the bed-side of his patients, with that certainty of success which finds, in every new case, a new confirmation of their truth.*

The truth of natural laws, and of the facts resulting therefrom, are themselves the best teachers, even for those who make opposition merely from an acquired spirit of opposition. They are the *only* advisers, because they forcibly open the eyes, even of the unwilling, and they are the best harmonizers of parties, because, as in everything else, so also in physiology, pathology and therapeutics, there can be but one truth.

From the difference which the non-medical public found between the doctrines of Homœopathy and those of the opposition to this science and art, by experience upon their own bodies, the *social* standing of both doctrines is manifest. It says that the professors of the universities and their pupils are, *in their own interest*, against Homœopathy and in favor of its suppression; while the *vox populi*, in the *common interest*, is for Homœopathy and against its suppression, as against every form of tyranny.

§. 354.

HOMŒOPATHY AND PHYSIOLOGICAL MEDICINE, COMMONLY CALLED ALLOPATHY, AT THE BAR OF STATISTICS.

It would be unworthy of Homœopathy should I reply to all the petty wranglers who have sought to attack it, and who, for this purpose, puff themselves up, as the frog in the fable, so as to appear

larger. But I will, by way of conclusion, set before all the opponents of Homœopathy, and also before the so-called scholars among them, the following statistical documents touching the immense advantage of Homœopathy over the physiological school; for, having adduced the natural laws according to which the Homœopathic cures occur, statistics, regarding this point, become of rational value.

To present the extensive statistical tables of Dr. Rosenberg (*Fortschritte*, etc., Leipzig. 1843. bei Schumann) would be over-stepping the limits of this work. Hence the summary of these tables will only be given.

Homœopathic experiments at Tulczyn in Podolia, conducted by Dr. Herrmann, by order of his Majesty the Emperor of Russia. The experiments lasted 100 days in the year 1829. Received, 165; cured, 141; died, 6; remaining, 18. *Mortality*, 3.64 per cent. The 18 remaining suffered from incurable organic defects, and had been treated without success in other hospitals also.

At the Infantry Hospital at St. Petersburg there were treated by Dr. Herrmann in 1829-30, by order of the Emperor, 409; cured 370; relieved, 7; not cured 4; dead, 16; remained, 12. *Mortality*, 3.92 per cent.

During the cholera in 1846 there were 242 patients treated at the so-called Homœopathic Cholera Hospital at Munich, of whom only six died. After the cessation of the cholera it was determined to continue this as a Homœopathic Hospital, for which the Chambers voted 4000 florins per annum. Consent was refused to the Chambers, but hardly in consequence of the following ratio of mortality. The summary of cases treated from December 13, 1836, to the end of December, 1837, in this Institution, in Munich, is as follows: Patients, 242; cured, 223; relieved, 13; died, 6. *Mortality*, 2.48 per cent.

Of 738 patients treated, from 1833 to 1841, in the Homœopathic Hospital at Günz, 666 were cured, 10 relieved, 5 not cured, 29 died; received moribund, 17; remaining, 11. *Mortality*, 3.92 per cent.

In the Homœopathic Hospital at Gyöngyös, from 1838 to 1841, there were treated 271. Cured, 219; relieved, 14; not cured, 7; died, 11; received moribund, 15; remaining, 5. *Mortality*, 4.06 per cent.

In the Homœopathic Hospital of the Sisters of Mercy at Vienna, from 1832 to 1841, there were treated 5,161. Cured, 4,710; not cured, 89; died, 267; brought in moribund, 34; remaining, 61. *Mortality*, 5.02 per cent.

Summary of cases treated in Leipsic from 1833 to 1841: Cases, 4,665; cured, 3,984; relieved, 297; not cured, 127; died, 157; received moribund, 31; remaining, 69. *Mortality*, 3.57 per cent.

According to the above, the mortality of these Homœopathic hospitals has an average of 4.22 per cent.

SUMMARY OF CASES IN VARIOUS ALLOPATHIC HOSPITALS.

Mary's Hospital, in St. Petersburg, in the year 1837. Patients, 3,356; cured, 2,261; died, 773; remained, 322. *Mortality*, 23.03 per cent.

All Saints Hospital, in Breslau, in the year 1833. Patients, 2,443; cured, 1,701; died, 409; relieved, 105; not cured, 60; remained, 168. *Mortality*, 16.74 per cent.

NEW YORK: DURATION OF TREATMENT, FIVE YEARS.

(ACCORDING TO DR. JOS. BUCHNER.)

<i>Diseases.</i>	HOMŒOPATHIC.		ALLOPATHIC.	
	<i>Treated.</i>	<i>Died.</i>	<i>Treated.</i>	<i>Died.</i>
Erysipelas,	349	3	325	75
Diarrhœa.	310	3	316	68
Fever without Typhus, . . .	3,273	41	1,994	107
Pleuritis,	371	5	51	8
Small Pox and Varioloid, . .	211	6	Acco unts	
Scarlatina,	102	3	Insuffi cient.	
Inflammation of Bowels, . .	211	13	46	19
Fever of all kinds,	5,399	334	4,367	487
Pneumonia.	710	45	309	91
Dysentery,	98	7	447	120
Typhus.	2,126	293	2,373	380
Organic Diseases of Heart,	109	17	56	29
Apoplexy.	21	6	35	17
Phthisis Pulmonalis.	502	194	247	120
	13,792	970	10,566	1,521

Consequently the mortality here figures up, in the Homœopathic hospitals, 7.03, in the Allopathic, 14.36 per cent.

Dr. Peters [Jno. C.!] exclaims at this report: "*Who, with such data before him, could be so great a fool as to subject himself to the heroic treatment of the old school?*"

CHARITÉ HOSPITAL, BERLIN.

<i>Year.</i>	<i>Patients.</i>	<i>Cured.</i>	<i>Died.</i>	<i>Mortality per cent.</i>
1832	6,298	4,565	843	13.54
1833	6,749	4,966	909	13.46
1834	6,390	4,017	894	13.99
1835	6,323	4,499	715	11.31
1836	7,322	5,310	886	12.10
1837	8,214	6,010	1,039	12.61
1838	9,097	6,955	893	9.82
1839	10,616	8,277	1,052	9.91

St. James' Hospital, in Leipsic, in 1839. Patients, 1,132; cured, 700; died, 117. *Mortality*, 10.33 per cent.

In the wards of the General Hospital, in Vienna, in the year 1838, there were: Patients, 20,545; died, 2,678. *Mortality*, 13.03 per cent. In the year 1841: Patients, 24,258; cured, 19,363; died, 3,068. *Mortality*, 12.73 per cent.

The average mortality of these hospitals is 12.08 per cent. Thus, under Homœopathic treatment, one patient in every twenty-three died, while under Allopathic, one in every eight.

As regards the results of the treatment of *cholera*, I will also give only the sums total, from Dr. Rosenberg's work, where the details can be more fully seen. The summary of cholera cases treated *Homœopathically*, in different countries, by different physicians, 14,014 patients; 12,748 cured, 1,266 died. A *mortality* of 9 per cent.

Under Allopathic treatment, in various countries, 457,536 patients; 184,044 cured and 222,342 died. A *mortality* of 48.39 per cent.

As regards the expenses, Dr. Rosenberg makes the following statement: In the year 1840, the cost for the daily support of a patient, in the Homœopathic stationary clinic at Leipsic, was $3\frac{2}{3}$ Groschen, [11cts]. During the same year, the Administration of General Charity, in Berlin, set down the the daily cost. for one patient, at $7\frac{1}{2}$ Groschen, [$22\frac{1}{2}$ cts.]; thus, in the Charité, the daily cost of a patient was about $3\frac{5}{8}$ Groschen, [$11\frac{1}{2}$ cents], more than in the Homœopathic Institutions.

Since, according to report, in the Charité about 10,000 patients are sustained, their support costs, if we assume, as an average, that each patient remains 20 days in the hospital, 62,500 Thalers, [\$41,666.66 $\frac{2}{3}$]. A like number of patients, remaining the same time under treatment in a Homœopathic hospital, would cost, per annum, 30,555 Thalers, $13\frac{1}{2}$ Grochen, [\$20,370.00]. Hence the Charité, under Homœopathic treatment, would save 31,945 Thalers [\$21,296.00] annually.

We find the same proportions also, in "Knolz's Darstellung der Humanitäts- und Heilanstalten," in Vienna, for the year 1848, according to which a patient cost, in these institutions, about $17\frac{1}{2}$ Kreuzers more a day than in Homœopathic hospitals. and that the government would have saved, in these Vienna institutions alone, 143,248 Florins, 53 Kreuzers. C M., [Conventions Münze,] had they been under Homœopathic treatment.

We now come to more recent dates.

Dr. Tessier was established in the St. Margaret's Hospital in Paris, and the opponents of Homœopathy sought to expel either him or Homœopathy. But they received from the administration of hospitals

at Paris the following reply: "Before, as well as since the time of Hippocrates, physicians have always been of different opinions and always will be. (It should have ceased to be so, and will, at least, not continue much longer, for, what is demonstrated according to natural law, excludes every arbitrary subjective interpretation. G.) But we, as managers of the hospitals, must stand aloof from their schools, and we take no part at all in their contentions, which are more or less of a scientific character. We content ourselves merely with establishing the results, which each physician obtained in his service, as we do at the present. In St. Margaret's Hospital we find two sections, one with 100 beds under Dr. Tessier, who treats his patients Homœopathically; the other, with 99 beds, under Dr. Valleix, and after his resignation, under Dr. Marotte, who treated their patients allopathically. The new comers were put into the first vacant bed, whether it happened to be in one section or the other. Hence, the test of the two therapeutic methods occurred as much as possible under the same circumstances. The mortality now was as follows: In the years 1849, 1850 and 1851 there were treated in the Allopathic section 3,724 patients, with 411 deaths, thus a mortality of 11 per cent.

In the Homœopathic section, 4,663 patients were treated, with 339 deaths — a mortality of 8 per cent.

The difference in the death rate in favor of Homœopathy is 3 per cent. (At present, considering the immense progress Homœopathy has made, since that time, the difference would be still more favorable. G.)

Under such results we are far from meddling with the liberty of medical art, or from wishing to put any hindrance in the way of Dr. Tessier's treating his patients Homœopathically; on the contrary, we would encourage him to persevere in his efforts, *which can only benefit humanity*.

In the same hospital, at the same time, the average duration of disease was 23 days in the Homœopathic section; in the Allopathic, 29 days, which thus, thanks to Homœopathy, permitted, in a hospital of 100 beds, *aid to be administered to 300 more patients* than under Allopathic treatment, or, in this manner, a hospital of 100 beds would be equal to an Allopathic hospital of 120 beds. The cost of drugs, under Allopathic treatment, amounted to 23,522 francs; in the Homœopathic to two or three hundred, thus about the 100th part."

Something similar happened at Thoissey, Departement Aisne, where Dr. Gastier managed the hospital of the place from 1832 to 1848. An Allopathic physician at Mâson, probably vexed thereat, declared, in a political paper of the city, that the Board of Administration of this

Hospital had forbidden Dr. Gastier to practice Homœopathy in this institution. Immediately thereafter the administration sent to the editor the following letter for publication :

"We can not be silent under a perfectly groundless statement, which would presuppose us to mistake entirely the sphere of our duty and meddle with affairs entirely foreign thereto. The administration of the hospitals has been established for the purpose of controlling the possessions and revenues of our institutions, and to watch over their well being, as well as to see that each officer conscientiously discharges his duties, *but by no means to prescribe rules to the physician in the practice of his art*, for this field does not belong to our studies, and we are strangers to it. It would, hence, have seemed ridiculous, at least, if we had indulged ourselves in forbidding the physician of our hospital the use of any remedy which seems good to him. Medicine is a free art, and the manner of its exhibition must be perfectly free. Never, and this best proves the consideration which medicine enjoys, *never, at any time, in any land, have even absolute governments undertaken to prescribe or forbid this or that curative method to the physician.* (There are still countries, however, where this happens. G.)

We contradict the announcement of Dr. C., in every respect, since he has fallen into an error which is, to us, quite incomprehensible; but we also declare that, in case we had really the right which he ascribes to us, we should not be at all inclined to make use of it. Our register shows that, since the accession of Dr. Gastier, the *number of deaths, in proportion to the number of cases, has been much less than ever before; that the cost of medicine has been almost nil, and that the service has been sensibly relieved by simplicity and regularity.*"

Board of Administration.—Magot, Burgomaster, Pres't. Challond, Adjunct. Lorin, Member of the General Council. Ducrest, Chaplain. Billaud, Senior Director.

THOISSEY, *January 2, 1846.*

Let us consider also an article from the April number, Vol. XXIII., p. 330, of the British Journal of Homœopathy, and of the London Homœopathic Review.

THE ENGLISH LIFE ASSURANCE COMPANY CONVERTED TO HOMŒOPATHY, BY THE EVIDENCE OF STATISTICS.

The month of December, 1864, marks an epoch in the history of Homœopathy, the memory of which will be ardently cherished by every Homœopath of the present generation; whilst, to this period will frequent reference here-

after be made, as that from which is to be dated a remarkably rapid growth of the system in public estimation.

On the 16th of December, 1864, there met together at the Freemasons' Hall, in London, under the presidency of Lord Henry Gordon, a number of individuals — in no respect identified with Homœopathy, but simply concerned in the promotion of their own pecuniary interests — to consider the bearing of this system of medical treatment on the health and life of the community. The parties referred to are the Directors and Shareholders of a company, entitled "The General Provident Assurance Company." The object of such institutions, is, we need hardly remark, commercial gain; and one of the principal means employed, is an investigation, conducted with scientific severity, into the duration of human life, with all the concomitant circumstances which tend to affect the health of individuals and classes.

Hitherto the actuaries of these valuable institutions have disregarded — and therefore omitted from their calculations — the very important consideration of *medical treatment*. The keenness of competition, however, which characterizes every department of trade in the present day, and stimulates to their utmost extent the intellectual faculties of our men of business, has at length, made itself felt even amongst these very conservative establishments; and, as a consequence, we find, in the case of The General Provident Assurance Company, the actuary directed to make an investigation into the hitherto unexplored region of *comparative medical treatment* — with what result it is scarcely necessary to inform the readers of this Journal.

To *some*, at least, of the Directors of the Provident, this result, no doubt, presented itself in the light of a discovery; to *none* could it be otherwise than gratifying to learn, that their labor had been rewarded by the acquisition of data capable of being turned to very profitable account, in the following well ascertained facts:— that persons treated by the Homœopathic system enjoy more robust health, are less frequently attacked by diseases, and when attacked, recover more rapidly than those treated by any other system; that with respect to the more fatal classes of disease, the mortality under Homœopathy is *small* in comparison with that of Allopathy; that there are diseases *not curable at all*, under the latter system, which are *perfectly curable* under the former; finally, that the medicines prescribed by Homœopaths do not injure the constitution, whereas those employed by Allopaths not unfrequently entail the most serious, and, in many instances, fatal consequences.

These data obtained, the Directors had but one duty to perform alike to themselves and to their constituents, which was to summon a meeting of their shareholders, and to lay before them the facts they had collected, and the decision at which they had arrived, viz., "*to open a special section for persons treated by the Homœopathic system, at a LOWER RATE OF PREMIUM THAN THAT CHARGED ON OTHER LIVES.*" And without a dissentient voice this proposition of their Directors was adopted by the shareholders of The General Provident Assurance Company.

Here, then, we have a testimony borne to the great practical value of Homœopathy which nothing can gainsay — against which ridicule and abuse, the only weapons by which we have hitherto been attacked, can avail nothing. It is not with "individual opinion" that our opponents have *now*

to deal — not even with the opinions of such men as the late Archbishop of Dublin, the late Dr. Gregory, Professor of Chemistry in the University of Edinburgh, or the late Dr. Samuel Brown, a man worthy to rank with the illustrious Faraday — all of whom lived and died in the faith of the truth of Homœopathy — and not to mention a host of other names of men, living and dead, in every department of literature, science, and art. It is not with *individual opinion*, we repeat, that our opponents have *now* to deal. They are *now* confronted with the result of an investigation directed to be made by a body of commercial men, for commercial purposes, conducted with that marvelous precision which has exalted the investigations of the assurance offices of this country to the rank of scientific verities — and endorsed by men whose intellectual faculties, when summoned to decide, must have been in liveliest exercise, seeing that they had to determine on a question in which they were without precedent for a guide, and in which their own pecuniary interests were deeply concerned. Well, the question *has been* decided, so far at least as *one* Assurance office, with its Actuary, Directors, and Shareholders is concerned; and the fact cannot be concealed. It will not be long, therefore, we may confidently predict, before other offices will follow this example. But, however numerous may hereafter become the adopters of this innovation, let it ever be remembered that to The General Provident Assurance Company belongs the distinguished honor of being the pioneer in this movement. And never let the circumstance be forgotten, which gives life and vigor to the great moral of this narrative, that the decision arrived at was the result of an investigation suggested by an observation of the ever increasing conquests of Homœopathy, especially amongst the highest and best educated classes of society, but cropping out everywhere throughout the world in spite of the adamantine rocks of ancient prejudice, and the alluvial deposits of social and professional influence — and *thereby* forcing itself upon the attention of intellectual men of business, whose avocation it is to avail themselves of every legitimate opening for the augmentation of their revenues, and the elevation in public estimation of that branch of industry with which they may happen to be connected.

In France, it was shown last year, that the new medical doctrine, Homœopathy, has taken from Allopathy, in the lower walks of life, one-tenth, and in the higher, one-eighth of its patients, and the workmen (of Paris) begged, in a petition to the Senate, for the establishment of a Homœopathic Hospital, in the following words:

“Of course, we do not demand the right to choose our physicians, since we have a claim to public aid, as it is in general administered, *but, at least, Hospitals and Institutions may be open to us, where we can commit our health, and the health of our families, to a method of cure, the blessings of which we have tested in cases innumerable; a method of cure which spares the strength of the laborer, and shortens disease and convalescence.*”

In order to demonstrate the extraordinary falling away of the public from physiological medicine, and its transition to Homœopathy, and

that too in an increasing ratio, I need only show by the following figures, the same falling away and conversion of physicians in various countries, though every conceivable means have been used by the physiological school to prevent it, and all their powers have been used, but in vain, to restrain them; and to the increase of Homœopathic physicians naturally corresponds a proportional increase of confidence in Homœopathy, in all classes of society. There were, in the year

1843, 390	Hom. physicians in	North America.	In 1863, 1670
" —	" "	South America.	" 161
" 70	" "	England.	" 283
" 450	" "	Germany.	" 555
" —	" "	Spain.	" 192
" 30	" "	Italy.	" 136
" 50	" "	France.	" 453
" —	" "	Africa.	" 6
" —	" "	Asia.	" 6
" —	" "	Australia.	" 2

It is not necessary to enlarge this list, or to complete it, with a notice of the new establishment of Homœopathic Hospitals, Dispensaries, etc., as this is beyond the scope of this work; the foregoing suffices to have shown, even by statistics, that for the *opponents* of Homœopathy it can no longer be prudent to seek to make an impression upon the public by abuses, slanders and other attacks against Homœopathic physicians, *but it seems rather called upon, with scientific earnestness, to lay hold upon the subject on all sides, to examine it, at the same time to make themselves masters of it and, consequently, manfully to reject the old and established errors.*

END OF PART II.

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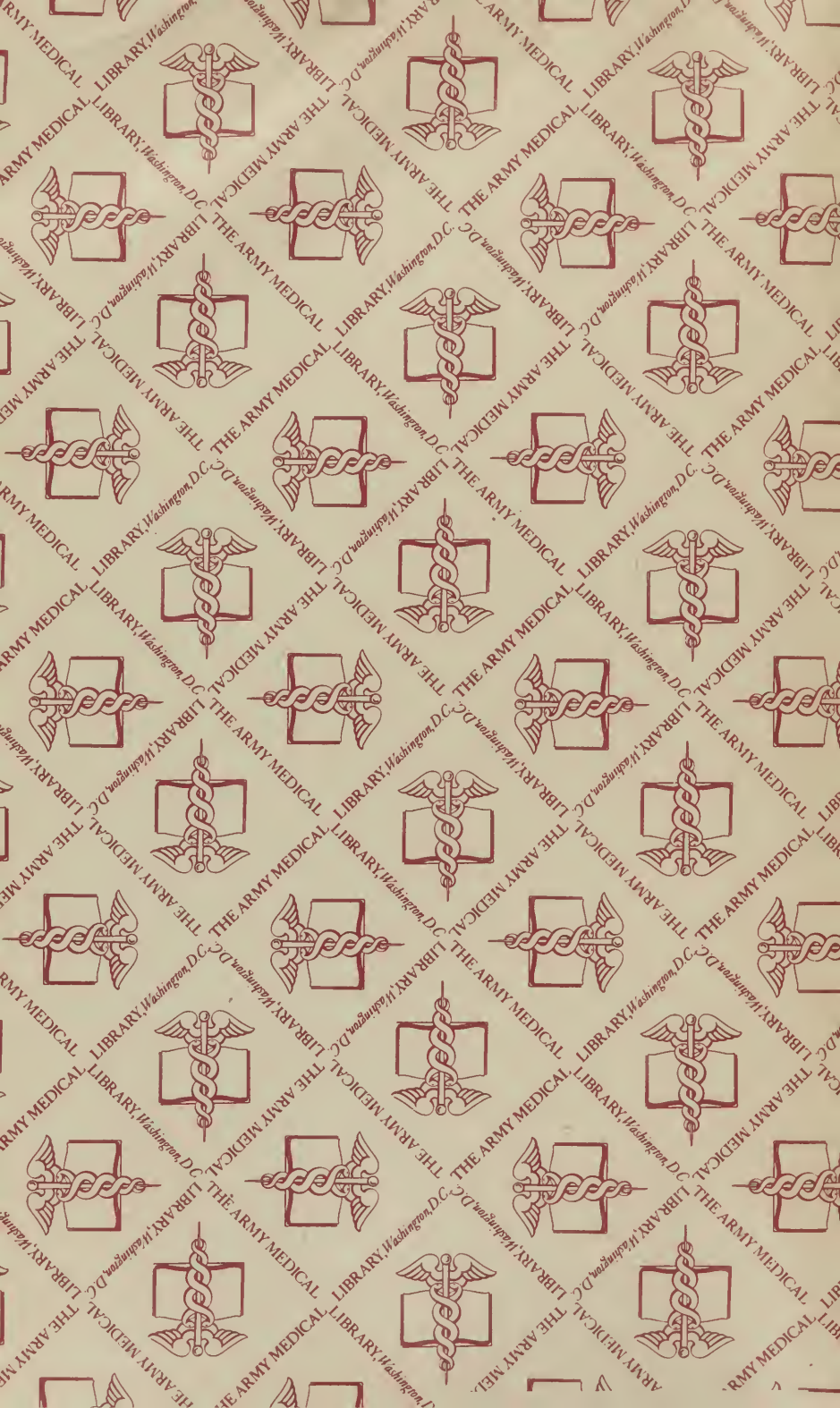
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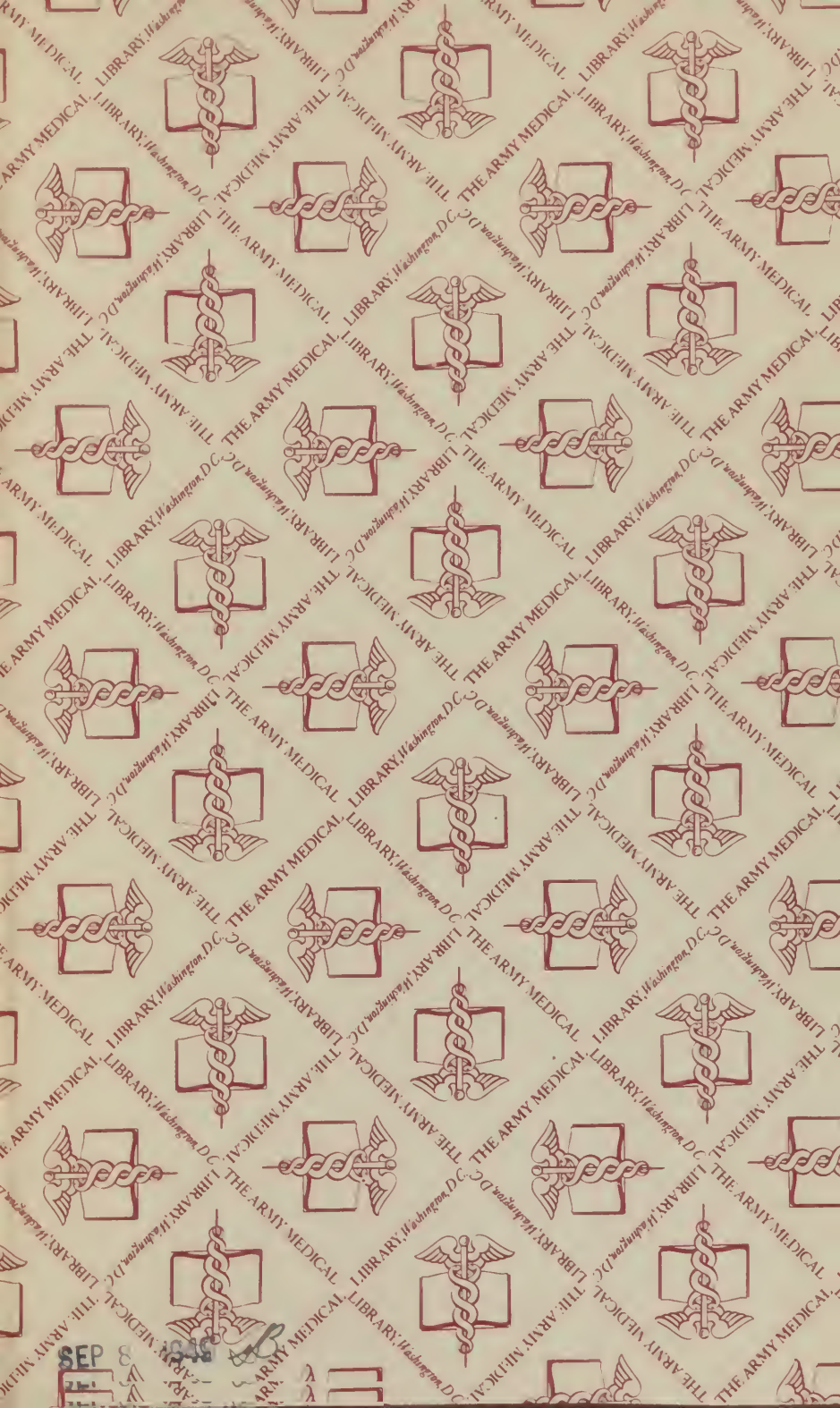
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